

Index

MONTHLY CATALOG, JANUARY-DECEMBER 1967

NOTE.—Entries appear in this Index under subjects or titles. Bulletins, circulars, etc., having no specific subjects are entered under the issuing office only. Index citations are to entry numbers in the catalog.

A

- A.E.C. *see* Atomic Energy Commission.
 A.F.O.S.R., *see* Air Force Office of Scientific Research.
 A.I.D., *see* International Development Agency.
 A.M.C., *see* Army Materiel Command.
 A.P.R.O., *see* Army Personnel Research Office.
 A.R.S. series, 2-9, 1672-74, 4083-86, 5615-16, 7241-52, 8803-8, 10147-156, 11915-922, 13196-203, 14733, 15824-827, 17299-300
 A.S.C.S., *see* Agricultural Stabilization and Conservation Service.
 Asmot, Haldor W. C., heat transfer and performance analysis of thermal probe for glaciers, 17377
 Asse, James H., mineral industry of Iowa, 2354
 AASHO, *see* American Association of State Highway Officials.
 AAXICO Airlines, Inc., aircraft accident, 7516
 Abadi, Victor, relief, 9219
 Abbot, C. G.:
 precipitation in 5 continents, 11790
 supplement to long-range forecast of United States precipitation, 11791
 Abbott, E. A., some turbidimetric observations in East Siberian Sea, 9988
 Abbott, Elaine E., basic data on economy of Republic of Ivory Coast, 13466
 Abbott, Geraldine W., agriculture in Indonesia, 9393
 Abbreviations:
 contractions used by FAA, air traffic control, etc., handbook, changes, 5716, 13273
 Federal aviation regulations, 1038, 9441, 12488, 14000
 Latin American press, glossary, 12721
 State and long postal unit names for use with ZIP codes, 7043
 Abel, John E., maximum utilization of FM subcarrier bandwidth, 9992
 Abel, Martin E., world food situation, prospects for world grain production, consumption, and trade, 15209
 Abel, Robert B., inner space, sea of opportunity, 6186
 Abies, *see* Fir.
 Ability:
 Federal-State programs for developing human resources, 6243
 human resources development programs of Federal Government—
 questions and outline for economic analysis, papers, 12189
 remarks, 12474
 replies from Government departments and agencies to questionnaire, compilation, 7590
 print additional copies, report, 12240
 1968 national ability counts contest for 11th and 12th grade students, announcement, 15067
 Ability—Continued
 perspectives on natural resources and human resources, seminar, 6597
 Ability grouping in education, grouping related to pupil learning, survey of research, 4721
 Abington, Pa., township, population, special census, 8951
 Ablating materials:
 ablative-material thrust chambers as components of storable-propellant rocket engines, evaluation, 15555
 char-forming phenolic polymer used for ablative composites, decomposition characteristics, 6362
 heat shield for X-15-2, arc-tunnel evaluation, 5238
 obtaining surface temperatures of materials in presence of extraneous radiation, 16975
 phenolic nylon—
 effect of composition, density, etc., on ablative performance, 9889
 low-density, thermophysical properties, 14377
 reentry signal loss attributable to ablation impurities, 14494
 Ablation:
 conical teflon models, static aerodynamic characteristics, measured and computed, 11555
 effect on boundary layer separation, 12954
 polymers, determination of kinetic parameters, by thermogravimetric analysis, 9896
 reentry vehicle heat shield, sensors measure, 6758
 sensors to obtain in-flight ablation measurements of thermal-protection materials, 1494
 surface, of noncharring materials, 2724
 thermal radiation studies of ablating bodies in ballistic range, survey, 5234
 Ablators:
 artificial meteors, study as ablators, 8480
 charring—
 internal temperature measurements, effect of thermocouple wire and configuration, 6864
 low density, parametric study, 2713
 Ables, Jackson H., Jr., filling and emptying systems, low-lift locks, Arkansas River project, hydraulic model investigation, 4743
 ABM, *see* Missiles.
 Abort, lunar mission, manual guidance technique with concentric-flight plan rendezvous, 14481
 Abortion, artificial, mechanism by use of ascorbic acid, USSR study, 1276
 Abraded cadmium-plated cable connectors repaired by conversion coating, 6746
 Abrahams, John E., Jr., summaries of research and training grants in solid waste disposal, 10063
 Abrahamsen, Martin A., cooperatives today and tomorrow, 2232

INDEX 1967

Abramson, H. Norman, dynamic behavior of liquids in moving containers, with applications to space vehicle technology, 5189

Abrasives:
cracks in glass electrical connector headers removed by dry blasting with fine abrasive, 12886

Federal item identification guides for supply cataloging, supplements, 3291

grading of abrasive grain on coated abrasive products, standard of trade, 12988

grading of grain for grinding wheels, standard of trade, 11581

grinding wheels, safe practices, 9723

materials, minerals yearbook chapter, 5097

Abscissas and weights for Gaussian quadrature, 5284

Absenteeism, Army personnel, AWOL and consequences, 5736

Absorptiometry with beta excited X-ray sources, interim report, 5770

Absorption:
absorptive properties of small particles and heavy-atom gases, 5182

1,4 cyclohexanediol (methylamine), regenerative carbon dioxide absorbent, 8589

infrared spectroscopy, use for representation of lipids of skin surface, Yugoslavian study, 12667

neutron resonance, calculation in 2-region problems, GAROL code, 15486

see also Atomic absorption.

Absorption coefficients:
determining scattering and absorption coefficients of paper by diffuse illumination, 11114

O₂ at oxygen windows, 18050

Absorption spectra, see Spectra.

Absorption spectrometry, see Spectrometry.

Abstracts, see names of departments, bureaus, etc., issuing abstracts—also subjects.

Academic degrees, see Degrees (colleges, universities, etc.).

Academy of Agricultural Sciences, Bulgaria, new members and corresponding members, 1205

Academy of Medical Sciences, USSR:
nominations, 5022

pediatrics session, report, 2461

vestnik (periodical), 4036

Academy of Sciences, Armenian SSR, annual meeting, evaluates recent work, 9636

Academy of Sciences, Azerbaijan SSR, annual meeting, 1966 activities discussed, 9668

Academy of Sciences, Bulgaria:
history and achievements, 6557

Vice President Vladimir Georgiyev interviewed, 4991, 6480

Academy of Sciences, Hungary, secretarial report of Department of Biological Sciences, 1269

Academy of Sciences, Kazakh SSR:
activities, 8250, 12677

dissertations defended by scientific co-workers, list, 11246

projects planned, 12753

scientific research, resolution, 4965

Academy of Sciences, Latvia:
activities reviewed, 8250

biographies of members, 1163

Academy of Sciences, Moldavian SSR, work reviewed, 8272

Academy of Sciences, Rumania, astronomical observatories, activities, 1290

Academy of Sciences, Tadzhik SSR:
conference of young scientists, 14254

Department of Biological Sciences, newly elected members, 16785

Academy of Sciences, Ukrainian SSR:
news, 9638

organization of comprehensive research, 15399

presidium, recent activities, reports, 11275

Academy of Sciences, USSR:
All-Union Entomological Society, activities report, 2471

Departments of Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds, annual convention, 12745

elections of biomedical scientists, 1331

new members, 2440

organic and physical chemistry reports, 6579

seminars discuss latest concepts in philosophy and science, 1291

vestnik (periodical), 4037

Academy of Sciences, Uzbek SSR, work reviewed, 8272

Acaricides, candidate materials evaluated, Brownsville, Tex., 13196

Acceleration:
angular—
eye-movements and subjective turning responses to 2 durations, 15980

responses to, following unilateral caloric habitation, 10322

visual fixation effects of brief periods on nystagmus and sensations of turning, 15981

density, calculation in computer program, 11481

impulse, nitrogen metabolism in brain of rats, USSR study, 1167

lateral, effect on liquid surface motion during weightlessness, 12966

linear, effect on vestibular organs in role of exploration of space, 5191

load factor, information on rectilinear display in spacecraft entry monitoring system, 14439

loads, cushioned by friction brake, 6771

measurements on board entry vehicle, use in determining structure of atmosphere, 9904

7 G levels, effect on renal excretion of solutes in rabbits, 14776

three-dimensional plasma, through magnetic fields, etc., 5256

water landings of Apollo spacecraft, dynamic model investigations, 16970

Accelerator reactors, see Reactors (atomic).

Accelerators:
accelerator-produced radiation, biological interpretation of dose, symposium proceedings, 15960

grid durability tests of mercury electron-bombardment ion thrusters, 14462

linear Hall current, instabilities, 5175

plasma accelerators, movable rf probe eliminates need for calibration, 17973

plasma gun, fast-acting calorimeter measures heat output, 12911

Rensselaer linear, use of plasma oscillations experiment, 12870

Soviet plans, 1342

Stanford Linear Accelerator Center dedication (remarks), 15975

traveling magnetic wave plasma, variable-length constant-velocity, experimental investigation, 18034

200-Bev, research program, AEC authorizing legislation, hearings, 10491

Accelerometers:
dynamic response to impact loadings of acceleration sensors having various mounting characteristics, 11521

instrument automatically selects peak acceleration signal from several accelerometers, 1459

instrument sequentially samples ac signals from several accelerometers, 8461

low level test methods investigated, 2642

miniature capacitive, especially applicable to telemetry, 1470

miniature piezoelectric triaxial, measures cranial accelerations, 2659

rectilinear, possesses self-calibration feature, 1453

Accession notice, industry profiles, 11229
 Accident insurance, credit, for student loans,
 increase maximum amount allowable in
 D.C. report, 882
 Accidents :
 boating—
 rules and regulations for reporting, 9007
 statistics, 9000
 causes—
 concrete brick and block industry, 16813
 hazardous trees on California forest rec-
 reation sites, 11125
 in school lunchrooms, 14282
 occupational safety aids, 9710, 16798
 families on guard against, 18163
 Federal employees, on-the-job injuries, fi-
 nancial protection, 1925
 how to investigate accidents, 9712, 16802
 industrial accidents in USAEC facilities,
 1956, revised summary, 15967
 industrial hazards, publications, price
 list, 17135
 investigations and records in industry, in-
 structor outline, 8291
 motorcycles—
 fun and personal protection from acci-
 dents, 17174
 United States, causes, control, etc., 5448
 preventing office accidents, occupational
 safety aid, 9713
 prevention, Public Health Service re-
 search grant projects, references to
 publications, 8645
 work accident costs, 9718
 work injuries, facts and figures, 1070
 see also Aircraft accidents—Mine acci-
 dents—Motor vehicle accidents—Rail-
 road accidents—Safety of life—Space-
 craft accidents.
 Acclimatization :
 acclimatization versus tolerance to stress,
 annotated bibliography, 17363
 high altitude, cardiopulmonary responses
 of resting man during early exposure,
 7413
 Accountants :
 career opportunities with Civil Aeronau-
 tics Board, 17448
 examination announcements, 199, 201,
 4390, 4393, 16067, 16069, 16074
 discontinuance notice, 7535
 Federal Credit Unions Bureau, opportuni-
 ties, 6246
 machine 3 & 2, Navy training course, 7018
 pay, national survey, 2507
 Accounting, see Accounts and accounting.
 Accounting machines, current industrial re-
 ports, 8942, 10356, 16000
 Accounts and accounting :
 accounting and finance manual, DSA, 979,
 13913-914, 17693
 accounting series releases, SEC, 2983
 air carriers, certificated, uniform system,
 3993
 automatic accounting in USSR computer
 centers, 1340
 Bulgarian scientific organizations, op-
 erating under their own systems, de-
 crees, 5030, 6586
 certificated route air carriers, uniform
 system, 8972, 13419
 code of Federal regulations, 6266
 commercial banks, accounts and deposits,
 June 30, 1966, national summary, 6247
 Communicable Disease Center, Bureau of
 State Services, accounting system re-
 view, GAO report, 1101
 cost accounting—
 scientific research institute, USSR,
 16786
 scientific research organizations, USSR,
 1343
 Federal agencies—
 accounting forms, GAO guidance man-
 ual, 11143

Accounts and accounting—Continued
 Federal agencies—Continued
 policies and procedures, GAO guidance
 manual, 11142
 principles and standards, 12585
 submission of systems for GAO ap-
 proval, hearing, 737
 transportation, GAO guidance manual,
 3570
 GAO review (periodical), 3371
 intercoastal shipping, accounting at ex-
 piration of rate suspension, hearings,
 16337
 joint financial management improvement
 program, annual report, 11144
 NASA guidelines for evaluation of con-
 tractor accounting systems, 6705
 national income and product accounts of
 United States, 1929-65, statistical
 tables, 1829
 public school accounting principles, 13509
 telephone companies, uniform system of
 accounts, FCC rules and regulations,
 3278
 your career in Bureau of Accounts, Treas-
 ury Department, 5576
 Accounts Bureau, your career in Bureau of
 Accounts, Treasury Department, 5576
 Acetazolamide, low doses to aid accommoda-
 tion of men to altitude, 1736
 Acetic acid :
 description, etc., technical reference, 9738
 electron optical survey of iron oxide films
 produced in H₂O, LiOH, and LiOH/
 EDTA solutions, 8594
 Acetic anhydride, description, etc., tech-
 nical reference, 9739
 Acetylene black in hydrazine, study of
 thixotropic suspensions, 11679
 Achievement, superior academic standard,
 in certain civil service examinations,
 and, 7531
 Achievement tests :
 constructing and using, guide for Navy
 instructors, 1544
 used in health examination surveys of per-
 sons aged 6-17 years, study, 13098
 Acid mine drainage, see Mine drainage.
 Acids :
 acid-base balance in anesthetized dog, hy-
 drazine effect, 7359
 Swiss research, 12733
 see also names of acids.
 Ackerman, Marilyn J., mineral industry of
 West Virginia, 6670
 Ackerman, Miss. :
 District Court, eastern division of north-
 ern district, terms to be held—
 law, 16138
 report, 12379
 Acoustic velocity meter, report on system
 development and testing, 14167
 Acoustics, see Noise—Noise suppressors—
 Sound.
 ACP, see Agricultural conservation program.
 ACR series, 11669, 13030
 Acreage allotments, see Agricultural prod-
 ucts—also names of products.
 Acreage marketing guides, 962, 2134, 4661,
 6127, 7828, 10872, 16441
 Acrylic plastics, see Plastics.
 Acta geographica Sinica (Chinese period-
 ical) :
 translations, 4943
 Actin, polymer differing from F-form, USSR
 discovery, 12713
 Actinomycin, effect of actinomycin 2703 on
 stabilization of conditioned reflexes and
 transition from short-term to long-term
 memory, USSR study, 1338
 Action, program guide 1967-68, 17121
 Actions at law :
 judgments, Justice Dept. policies and pro-
 cedures, GAO review, 11154
 litigation releases, Securities and Ex-
 change Commission, 3516

INDEX 1967

Actions at law—Continued
multidistrict litigation, provide pretrial
consolidation—
hearings, 6119, 7821
report, 13833
see also Appeals—Civil procedure—Habeas
corpus.

Activation, *see* Heat of activation.

Activation analysis, *see* Radioactivation
analysis.

Activity patterns of campers, 8071

Acts of Congress, *see* Law.

Actuarial notes, 1603, 5501, 7115-17, 11792,
14644, 15736

Actuarial services for dental service corpo-
ration, 17114

Actuarial study series, 7118, 8686, 10082

Actuaries Board, retirement and disability
fund, 1965, report, 4489

Actuators:
device schedules rate of valve closure, 6840
single solenoid, fuel and oxidizer valve
assembly employs, 9825B

Acuity:
and phoria among submariners, longitudi-
nal study, 12791
visual, binocular, of adults, by region and
selected demographic characteristics,
United States, 13099

Acute conditions, incidence and associated
disability, United States, July 1965-June
1966, 14637

Ad Hoc Panel on Scyllac, report, 13347

Adam Weiss Peak quadrangle, Wyo., geology,
2350

Adams, Bert K., principles of public school
accounting, 16509

Adams, Ernst W., theoretical solution of
nonlinear problem of transient cooling of
opaque sphere in space, 14458

Adams, Herman, relief, 330

Adams, James W., and others, relief, 600,
13777

Adams, Jimmie D., study of man in oxygen-
helium atmosphere, major and minor at-
mospheric components, 59

Adams, John G.:
addresses, etc.—
Feb. 28, 1967, 7519
Apr. 24, 1967, 8975
Apr. 28, 1967, 8974
July 5, 1967, 12097

Adams, Walter:
government, universities, and interna-
tional affairs, crisis in identity, 10516
strategic importance of Western Europe,
5614

Adams County, Pa., soil survey report, 13123

Adams County, Wash., soil survey report,
18212

Adams Manufacturing Co., relief, 330

Adaptation, *see* Dark adaptation.

Adaptation to visual and nonvisual rear-
rangement, 5167

Adapters, line adapter provides quick dis-
connect under moderate side loading,
15535

Addicott, W. O., zoogeographic evidence for
late Tertiary lateral slip on San Andreas
fault, Calif., 17827

Addicts, *see* Narcotic addicts.

Additives, jet fuel anti-icing, effects on fuel
tank linings, final report, 9991
see also Food additives.

Addor, Eugene E., environmental character-
istics of tunnels in South Vietnam, 15229

Addresses (mail matter), *see* Mail matter.

Addresses, lectures, etc.:
AEC Speakers Bureau for Washington
Metropolitan area, availability of speak-
ers, 5798
by—
Adams, John G., 7519, 8974-75, 12097
Allen, David B., 13047
Andrews, A. M., 7522
Andrews, Archie M., 6465, 11228

Addresses, lectures, etc.—Continued
by—continued

Baker, John A., 4095, 4109, 13208,
13238-239, 13248, 15675

Barr, Joseph W., 1656, 2949, 2955, 5571,
10122, 11884, 17265, 17269, 18242,
18245

Barrett, Ashton C., 7968-69

Battle, Mark, 2484, 17298

Beckman, Norman, 16707

Bekkedahl, Norman, 9935

Bennett, Robert L., 15322

Berkner, Lloyd V., 5281

Bird, Kermit, 12458

Blaplinghoff, Raymond L., 5280

Boehm, Charles F., 10455-456, 16098

Borum, Rodney L., 10327, 10333-334

Boyd, Alan S., 1950

Brenner, Edward J., 2789, 5372, 10020,
11685, 11689, 14601

Brenner, F. Cecil, 9946

Brezhnev, Leonid I., 9317

Bridwell, Lowell K., 238, 1952-53

Brimmer, Andrew F., 1065, 2265, 6300,
7999-8000, 9493, 11050, 11053, 11056,
14037, 15249, 16590

Brzezinski, Zbigniew, 14676

Bundy, William P., 17220

Cass, Millard, 5039, 11295

Cassell, Frank H., 10945, 12473

Conklin, Maxwell R., 181

Connell, Michael L., 10049

Connor, John T., 223, 239-242, 1937,
1954-60, 4449-50, 9010

Cortright, Edgar M., 8514

Crafts, Edward C., 4914

Cushman, Bernard, 18088

Cusick, Leo J., 9583

Cushman, John P., 17392

Daane, J. Dewey, 1067, 4784, 16598

Davis, Ross D., 6158, 10904, 13934

Davis, True, 1654, 5574, 7210-11, 7214,
11886, 15810

Day, James V., 6259, 16579

Deming, Frederick L., 2946, 2953, 17270,
18241

DiLuzio, Frank C., 16719

Eberhard, John P., 2735

Eckler, A. Ross, 1889, 10383

Fanning, John H., 9949, 15596

Faulkner, Ralford L., 10316

Fay, Joseph L., 15737

Fay, William T., 4304

Feer, Mark C., 1936

Flood, Daniel J., 520

Fogel, Sander H., 8045

Fowler, Henry H., 1653, 1655, 1657,
2950, 2952, 2954, 2956-57, 5573,
7212-13, 8775-77, 10120-121, 10124,
11883, 14709, 17271-272, 18243

Fox, Lawrence A., 2418, 17854

Freeman, Orville L., 22-26, 51-52,
1676-77, 1694, 1696, 1719, 4091-
94, 4108, 4119, 4142, 7257-58, 7268,
7280, 7295-96, 8821-24, 10158-160,
10163, 10196-198, 13209, 13218-220,
13240-243, 15834-835, 15846, 15876-
877

Fumich, George, Jr., 8997

Furness, Betty, 17101

Gardner, John W., 2377

George, J. Mishell, 2416

Giles, Robert E., 4426, 5958

Gilles, Roderick M., 4447-48

Gilliland, Whitney, 1898, 8971, 17447,
17449

Goddard, James E., 13162

Goddard, James L., 14075

Goodwin, Robert C., 6204, 12474, 16515

Goodyear, Hugo V., 5593

Gulbert, Edward A., 236, 1951

Gulick, J. W., 6826-27, 9751, 12787,
17907-908

Gullander, W. P., 8616A

Haar, Charles M., 16714

JANUARY-DECEMBER

Addresses, lectures, etc.—Continued

by—continued
 18208 Haddon, William, jr., 1940, 1963-64,
 4423, 5959
 Hagan, Robert L., 4304
 Hamburger, Richard, 1819
 Harlee, John, 2246, 7971-72, 9456,
 16577-578
 Harvey, Thomas W., 10905, 16477,
 16479
 Hearn, George H., 6258, 6260, 7970,
 11016
 Hedges, Janice N., 8796
 Hollomon, J. Herbert, 243-244, 4429,
 4452, 7568, 7583-84, 12128-130
 Horne, John E., 7960, 9452, 17756
 Howe, Harold, II, 996, 998, 1004, 1006,
 1015, 2179, 2188, 2192, 6177, 6179-80,
 9403-4, 9407-8, 9412, 10935, 12462-
 464, 13957, 13965, 15210, 15214,
 16505, 16512, 17716
 Hummel, Don, 6436, 16715
 Humphrey, Hubert, 1961, 4455, 5446,
 9580, 14209, 15317, 17839
 Humphrey, Thomas F., 5478
 Ink, Dwight, 17842
 Joanes, Raymond A., 4818
 Jenkins, Howard, jr., 14525, 15593
 Johnson, Hugh A., 12461
 Johnson, Nicholas, 16564
 Johnson, Wilfrid E., 131, 1817, 7441,
 8914, 17407
 1937 Katz, Jacob E., 144, 8924, 10829, 15985
 Katzenbach, Nicholas deB., 10099,
 18231
 Kaye, William G., 1825
 Ketchum, Harry W., 5807
 Keyserling, Mary D., 1668, 8798, 10142,
 11908, 17298
 Kierman, Owen B., 14853
 Kincaid, John F., 16091, 17472
 Kohler, Roy D., 10099
 Kromer, George W., 4704-5
 Kurylo, Walter, 1962
 17270 Lang, A. Scheffer, 4451
 Lattu, Onnie P., 5366, 17101
 Lauriat, Patience, 1880
 Lindley, Jonathan, 13929
 Low, George M., 5498
 Luce, Charles F., 8298, 8210
 Ludwig, John H., 2838
 McCahill, William P., 11702, 13068,
 18140, 18142-143
 McGulre, Marie C., 17843
 Mackenzie, Vernon G., 8636
 McNamara, Robert S., 4527
 McNeill, Robert L., 226
 McQuade, Lawrence C., 224, 228, 237,
 1965, 4425, 4427, 7571, 9012, 9025,
 10452, 12127, 13468, 17473, 17483
 Macy, John W., jr., 1932
 Maisel, Sherman J., 1060, 1064, 4781,
 7996, 9496
 Martin, Wm. McC., jr., 4787, 11058,
 12536
 Megonnell, William H., 1580
 Mehren, George L., 30, 13210, 15844
 Middleton, John T., 8640, 13072
 Mitchell, George W., 1068, 2261, 4786,
 6297, 9494, 11052, 15248, 16593
 Moffett, Roy R., 12785
 Moore, J. Cordell, 17847
 Morgan, Roy L., 1849
 Morton, James G., 4424, 4428, 7561,
 7682, 9009, 9011
 Mossinghoff, Gerald J., 13048
 Murphy, Charles S., 1900, 8968, 8973,
 12096, 16049
 3515 Murphy, Richard J., 13057, 14611
 Murphy, Robert T., 186, 189, 1899, 4368,
 5911, 7523, 13420, 17445-446
 787 Nabrit, Samuel M., 4242, 7435, 8917,
 12020, 12025
 Nehmer, Stanley, 10470, 16111
 Neblitt, John A., 11705

Addresses, lectures, etc.—Continued

by—continued
 Newell, Homer E., 6913
 O'Brien, Gerald D., 5370, 7031, 14603-
 605
 O'Brien, Lawrence F., 1555-56, 7038,
 7106, 8675, 11697, 11690-691, 13049,
 14610, 15643, 17109-110, 18135
 O'Connell, Joseph J., jr., 13015, 18092-
 93
 Oettinger, Katherine B., 1893
 O'Malley, Lambert S., 17708
 Ordman, Arnold, 6937
 Owens, James M., 142, 5806
 Pearl, Robert B., 5885
 Peterson, Esther, 6588, 16796
 Pollack, Gerald A., 5964, 7585
 Pollack, Herman, 14671
 President Johnson, 1626, 2256, 2734,
 2880, 4780, 12195, 18228
 Prisk, Charles W., 6475
 Ramey, James T., 8919, 10313
 Rand, Robert L., 7961, 17755
 Rauner, R. M., 7870
 Rattie, Dwight F., 16713
 Robertson, J. L., 2263, 12531
 Rostow, Eugene V., 18232
 Roth, William M., 14663, 18218-220
 Rusk, Dean, 1628-29, 2882, 18229
 Russell, Harold, 17125
 Schmidt, Wyman C., 4829
 Schnellbacher, E. E., 4920, 8224
 Schnittker, John A., 27, 1695, 4090,
 4101, 4141, 7259, 7269, 13244, 13253
 Schoppert, David W., 4453
 Seaborg, Glenn T., 130, 132-135, 1815,
 1818, 4240, 4243-44, 4246-47, 5789,
 7438-39, 8915, 8918, 10305-307,
 10310, 10315, 10318-319, 12021-23,
 15970, 15972, 15974-976, 17401-402,
 17404
 Seamans, Robert C., jr., 2733
 Seeley, David S., 4718
 Shapiro, Karl, 12780
 Shaw, William H., 235, 1966, 5949-50,
 7565, 7570, 10453, 13453, 17471
 Shepardson, Charles N., 1061, 1069,
 6298
 Sherwin, Chalmers W., 10457
 Sielski, Matthew C., 7567
 Sierra, Teresa, 11700
 Sleco, Joseph J., 5530
 Solomon, Anthony M., 2936
 Sternlight, Peter D., 2951
 Stewart, William H., 7080, 10045
 Surrey, Stanley S., 7215, 8769, 10117,
 10123, 10125, 13165
 Tauber, Conrad, 4357
 Tape, Gerald F., 1813, 8916
 Tarjan, George, 7048
 Taylor, H. Ralph, 2379, 2386, 11198,
 17841
 Thayer, Louis M., 18094
 Thompson, John W., 4703, 12459
 Tison, James C., jr., 12116
 Trowbridge, Alexander B., 227, 234, 245,
 5948, 5957, 5960, 7569, 7581, 9022-
 23, 10449-451, 10454, 10464, 10466-
 468, 10471, 12126, 16092-96, 16109,
 17469
 Truman, Harry S., 1059
 Turner, Francis C., 5863
 Tuten, J. Russell, 16060
 Udall, Stewart L., 6439, 15324
 Wallace, Robert L., 18244
 Walsh, Don, 1602
 Walsh, Robert M., 12460
 Washington, George, 5976
 print additional copies, report, 2018
 Weaver, George L-P, 8283
 Weaver, Robert C., 9581, 11196-197
 Webb, James E., 17022, 18059
 Welsh, Edward C., 1516
 West, Quentin M., 16496
 White, Robert M., 7937
 Whitton, Rex M., 2844

INDEX 1967

Addresses, lectures, etc.—Continued by—continued

- Williams, James D., 11716
- Wirtz, W. Willard, 1349, 1353-54, 5033, 5037-38, 6589
- Wood, Robert C., 11209, 16716
- Yolles, Stanley F., 8655
- Zagoria, Sam, 2750, 6939, 8532, 12993, 17043-44
- FMC SP series, 2246-47, 6258-60, 7968-73, 9456, 11016, 16577-579
- MA SP series, 6626-27, 9751, 12787-794, 17907-908
- National Conference on State Technical services, 12131
- plastics in Government, 4 conference papers, Society of Plastics Industry, 2155
- public papers of Presidents of United States, announcement and order form, 8622
- Addressing machines, digital control computers for automatic addressing of goods, USSR book excerpts, 15383
- Adelberger, Howard H., and wife, relief, 7618
- Aden, geology, 8173
- Aden, Gulf of, sailing directions, 9971
- Adenoviruses, human, tumorigenic action, USSR study, 6560
- Adeorbidae, *see* Gastropods.
- Adhesive tape, pressure-sensitive and gummed, inspection, sampling, and testing methods, Federal standard, 9499
- Adhesives:
 - Federal item identification guides for supply cataloging, supplements, 3290
 - for polyester films cures at room temperature, has high initial tack, 2631
 - polyurethane, use of nonwoven glass fiber mat to reinforce, 11450
 - resistance heating releases structural adhesive, 8469A
 - resorcinol-resin, gluing ammonium-salt-treated southern pine, 8063
 - survey, 5195
 - unilaxial creep, measurement in free film form, 12570
 - viscous, flowmeter determines mix ratio, 17988
- Adirondack-type shelter, 10186
- Adjustment Board, National Railroad, *see* National Railroad Adjustment Board.
- Adjutant General's Office:
 - Army Library—
 - selected current acquisitions, 3864
 - selected periodical literature, 3867
- Administration, *see* Administrative management.
- Administrative agencies, *see* Government offices.
- Administrative Conference of United States:
 - appropriations, 1968—
 - hearings, 6027, 10806
 - report, 9097
- Administrative facilities, Navy Dept. design manual, 17065
- Administrative management:
 - Air Force, laboratory policies and practices for procurement management, pamphlet, 13261
 - and computers, USSR study, 6506
 - aviation maintenance I & C, Navy training course, 7011
 - calling all majors for administrative careers in Federal agencies, 10431
 - civil defense management textbook, 16056
 - civilian manpower management, journal of Navy civilian personnel management, 8602
 - contractor data and reports, 5702
 - cost, source of funds, expended for public assistance payments, 4752
 - data processing management in Federal Government, hearings, 16328

Administrative management—Continued

- Defense Department, correspondence course offered by Industrial College of Armed Forces, information booklet, 9607
- defense traffic management handbook, 6142, 10859
- dental administration, Navy manual, changes, 8576, 14584
- DoD nationwide priority referral system, improved management, 2152
- farm programs, operation and administration, problems and complaints, hearings, 10799
- Federal administrative and management positions, examination announcement, discontinuance notice, 10424
- food service management, Air Force manual, 8857
- free management assistance publications, list, 5492
- GREMEX, new management training concept, 9852
- management and marginal employee, personnel practices, etc., 2242
- management and technical aid for displaced small businesses, 14643
- management course presentations, 13115
- management course program, topics, 1598, 7109
- management information, blueprint for tomorrow (address), 4119
- manpower, improved management in Federal Government, 12209
- print as House document, report, 12280
- manpower rotation policy models, 7404
- military personnel policies, digest, Army pamphlet, 17382
- NASA management issuances—
 - indexes, 11395, 15496
 - table of contents, 15513
- Naval Personnel Bureau, personnel administration, functions, etc., 11661
- Navy management review (periodical), 3614
- PACAF basic bibliographies—
 - management, excluding personnel, 10228
 - personnel management, 10230
- packaging administration, Army field manual, 15938
- personnel, code of Federal regulations, 6292
- personnel information bulletin of VA, 3651
- personnel literature, 3682
- personnel management, pay, national survey, 2507
- personnel management series, 14871
- Personnel Management Training Center, curriculum, administration, etc., 4405
- personnel practices in public institutions for delinquent children, survey, 4367
- perspectives in defense management (periodical), 12658
- progress interview, helps for management in counseling people about their work, 6373
- public management sources, 3784
- public works management, Navy, 2781
- records management and services, procedures, GAO guidance manual, 6374
- research equipment for Federal laboratories, better management, procurement, and utilization, hearing, 15028
- river basin operations, alternative institutional arrangements for managing, 17292
- school plant management series, 16499
- second level management, review and analysis, 13450
- senior level positions, examination announcement, 8988
- shelter management, civil defense textbook, 16057
- small business—
 - management aids for small manufacturers, annual compilation, 2854

Administrative management—Continued

small business—continued
 management series, 2857, 13118
 starting and managing series, 5497,
 8679, 15733
 Small Business Administration, free man-
 agement assistance publications, list,
 18202
 staff, examination announcement, 16068
 Treasury Department, progress in man-
 agement improvement, report, 5572
 Veterans Administration—
 hospitals, research bulletin, 11890
 management internships, 8781
 Vis-A-Plan technique provides perform-
 ance-time scale, 15531

Administrative Office of United States
Courts:

annual report, 8800
 Federal Judicial Center, establish—
 hearings, 16422
 report, 12555
 Administrative personnel, *see* Administrative
 management.

Administrative procedure:

act—
 amend, hearings, 13871
 codify provisions of public law 89-487—
 law, 12165
 reports, 7707, 10780
 public information section, Attorney
 General's memorandum, 12762
 District of Columbia government, pre-
 scribe, report, 9130
 Government offices—
 administrative delay evaluation charts,
 4647
 delay in proceedings, questionnaire sur-
 vey, 2130
 investigation—
 authorization, report, 4616
 expenses, report, 15099
 report on findings, 9280

Administrators:

administrative staff, examination an-
 nouncement, 16068
 definition under fair labor standards act,
 1665
 Federal Aviation Agency representatives,
 FAA regulations, 11004

Admiral's House, quarters of chiefs of naval
 operations, history, 9976

Admittance (electricity), *see* Impedance.

Adolescence, *see* Youth.

Adoptions in 1965, supplement to child wel-
 fare statistics, 16043

ADP Management Training Center, manage-
 ment of automatic data processing in Fed-
 eral Government, training programs, 16062

Adrenal glands:

airmen who apply insecticides from air-
 craft may suffer ill-defined effects, 17410
 rate of function, effect on parotid fluid
 uric acid levels, 11959
 Adsorbents, coal and modified coals, use for
 removing organic contaminants from waste
 waters, 2588

Adsorption:

carbon dioxide—
 of anthracite, surface area studies, 1412
 on carbon solids, 5351
 carbon-14 labeled stearic acid on iron,
 study, 14595
 effect of adsorbed water upon spreading of
 organic liquids on soda-lime glass, 18110
 environmentally modulated process for
 desalting water, 8212
 organic compounds, at electrodes, 10003

Adult education, *see* Education.

Adults:

binocular visual acuity, by region and
 selected demographic characteristics,
 13099
 civil defense education, personal and fam-
 ily survival, teachers manual, changes,
 7916, 12470

Adults—Continued

decayed, missing, and filled teeth in adults,
 1960-62, United States, 5470
 mean blood hematocrit, 10069
 osteoarthritis, demographic characteristics,
 5468

serum cholesterol levels, 8661

Advanced Study in Health Sciences, Inter-
 national Center for, *see* International
 Center for Advanced Study in Health Sciences.

Advanced threshold reduction techniques
 study, 6716

Adverse action, law and regulations, an-
 notated, 3300

Advertising:

alert, 2989
 consumer confidence, important (re-
 marks), 241
 consumer response to various levels of
 advertising for fluid milk, 17322
 deceptive, trade regulation rule relating
 to sizes of viewable pictures, shown by
 television receiving sets, 6337, 11068
 medical, compendium, 14074
 network TV, anticompetitive effects of
 sale, hearings, 10857, 16424
 outdoor, along Federal-aid highways, con-
 trol, 1968 authorizations—
 hearings, 15174
 reports, 15126, 16272
 pacemaker of business expansion and bet-
 ter business practice (remarks), 7582
 retail stores, bibliography, 5494

Advisory Commission on Information:

report, 1966—
 departmental edition, 13190
 document edition, 13550

Advisory Commission on Intergovernmental

Relations: Relations:
 act establishing, amend, law, 446
 annual report, 7240
 appropriations, 1908—
 hearings, 6027, 10806
 law, 13529
 reports, 9097, 10791
 general information, 13191
 metropolitan America, challenge to Fed-
 eralism, study, 2048
 print additional copies, reports, 10590,
 10785

State legislative program, 15822
 study information service to aid partici-
 pation in federally assisted programs,
 hearings, 4639

Advisory Commission on International Edu-
 cational and Cultural Affairs, report, 4th
 annual, 4487

Advisory Committee on HEW Relationships
 with State Health Agencies, report, 6413
 Advisory Committee on Older Americans,
 declaration of objections for Older Ameri-
 cans under title 3, Older Americans act,
 10145

Advisory Committee on the Arts, report on
 cultural presentations, USA, 17226

Advisory Committee on Voluntary Foreign
 Aid, reports of American registered agen-
 cies, 2419, 12655

Advisory committees, PHS public advisory
 groups, authority, structure, functions,
 2831, 11750

Advisory Council on Extension and Contin-
 uing Education, *see* National Advisory
 Council on Extension and Continuing
 Education.

Advisory Council on Historic Preservation:
 establish—
 law, 384
 report, 673

Advisory Council on International Monetary
 and Financial Policies, *see* National Coun-
 cil on International Monetary and Finan-
 cial Policies.

Advisory Council on Programs Relating to
 Population Growth, establish, report,
 13837

INDEX 1967

- Advisory Council on State Departments of Education, annual report, 13961
- Advisory Health Council, National, *see* National Advisory Health Council
- Advisory, monthly newsletter from Office of National Councils and Organizations to advisory councils, 2990
- AE-CL series, 3091
- AEC, *see* Atomic Energy Commission.
- AEC-NASA tech briefs, 5139-56, 6695-6704, 8384-8404, 9793-98, 11390-392, 12832-845, 14363-369, 15485-494, 16877-887, 17919-932
- AEE, *see* American Expeditionary Forces.
- Aeneas quadrangle, Wash., eastern part, geology, 16682
- Aeration, capacity of streams, 9570
- Aerial dispersal of pink bollworm in U.S. and Mexico, 5678
- Aerial mapping:
airborne infrared mapper as tool for detecting and measuring fires, 8106
image interpreter map displays, chip versus hard copy, 4224
- Aerial photogrammetry, *see* Photogrammetry.
- Aerial photography:
ASCS maps, status, 15833
detection and classification of ash dieback on large-scale color aerial photographs, 5116
forester's guide to photo interpretation, 4097
Gemini IV mission, terrain photography, 11528
large scale 70-mm photographs, wedge measures parallax separations, 16659
soils, aerial-photo interpretation in classifying and mapping, 4096
techniques for—
estimating damage by insects in western forests, 14078
recreation inventory of mountain lakes and streams, 14128
television cloud photography, meteorological satellite data—
ESSA 3, 16536
TIROS IX, 6227
TIROS X, 13990
worldwide use of airphotos in agriculture, 17304
- Aerial radiological measuring survey; aeroradioactivity—
Sedan project 62.80c, 12002
Small Boy project 62.80b, 12001
aeroradioactivity and areal geology—
Pittsburgh area, 1779
southeastern New York and southern New England, 1778
Orlando area, 1780
Parr area, S.C., 1781
Project Sedan aerial radiometric survey, 17426
- Aerial spraying, *see* Sprays and spraying.
- Aerial surveys, waterfowl counts 1961-66, factors influencing, 15288
- Aero Trucking, Inc., motor carrier accident, 16875
- Aeroballistic launch vehicles, *see* Spacecraft.
- Aerobee rockets, *see* Rockets.
- Aerobic-bacteria culture apparatus employing new foambreaker, 10007
- Aerodynamic heating:
correlation of free-flight turbulent heat-transfer data from axisymmetric bodies with compressible flat-plate relationships, 5272
Project Mercury spacecraft afterbody, flight test data compared with prediction methods, 14372
- Aerodynamics:
characteristics—
cone-cylinder-frustum-cylinder configurations, 9804
spherically blunted cones, 14488
- Aerodynamics—Continued
characteristics—continued
tension shell shapes, configuration modifications effects, 14475
computer program simplifies transient and steady-state temperature prediction for complex body shapes, 9826A
decelerators, wakes, their structure and influence upon, 9808
flow prediction in shock layer over bodies at small angles of attack, methods, 11507
gas-dynamics—
calculation of installation with light piston, USSR study, 4999
methods of high-speed measurement, 4997
hypersonic characteristics of minimum-wave-drag bodies having variations in cross-sectional shape, 16971
hypersonic performance of minimum-wave-drag bodies, 1515, 12968
loads and dynamic response of rotor blades of tandem-rotor helicopter, predicting, 13310
longitudinal characteristics of high-drag bodies, 9892
optimum body shapes at hypersonic speeds, studies, 18024
pressures and forces of flare-stabilized bodies in air and in mixture of 85-percent CO₂ and 15-percent air, 17011
spherically blunted cones with base flares, characteristics, 1486
static characteristics, ablating conical teflon models, measured and computed, 11555
static longitudinal characteristics of decelerator test vehicle, 6897.
supersonic handbook, 1542
supersonic viscosity and heat transfer effects, handbook, 1542
testing of airborne lightweight high-efficiency radial fan, 10292
transonic characteristics of supersonic fighter-bomber airplane model with external fuel tanks and other modifications, 1505
transonic investigation of tension shell and blunted 100° conical shapes for unmanned entry vehicles, 1504
unidimensional problems in gas dynamics, numerical solution, characteristics method, application, 14500
see also Aircraft—Airplanes—Boundary layer—Drag (aerodynamics)—Flight—Flow—Flutter (aircraft)—Heat transfer—Helicopters—Lift (aircraft)—Spacecraft—Wings (aircraft).
- Aeroelasticity, divergence characteristics of unguided, slender-body, multistage launch vehicles, 9883
- Aeroembolism:
caisson disease, prevention and treatment, USSR study, 8238
decompression sickness in high-altitude flight, 14778
measures for providing safe working conditions during caisson operations described, USSR study, 6524
- Aeromagnetic maps, surveys, etc., *see* Maps and charts.
- Aeromedical reviews, 4174, 7340, 11953, 14769
- Aeronautical and Space Sciences Committee, Senate:
calendar, 3488
committee prints, 4628, 7791
hearings, 6088-89, 7790, 9299, 10796-797, 12396
investigations and studies, aeronautics and space activities, authorization, report, 4605
report, 12390
- Aeronautical charts, *see* Maps and charts.

Aeronautical instruments, stall barrier as new preventive in accidents, 1823

Aeronautical supplies:
 aircraft type certificate data sheets and specifications, 3018, 12487
 coordination between procurement of technical equipment and its ultimate utilization, FAA, GAO review, 2346
 hi-valu parts, management by Pacific Air Forces bases, GAO report, 8133
 inventory accounting systems for aeronautical equipment, Navy Dept., GAO review, 16676

Aeronautics:
 activities of Federal departments, etc., investigation, authorization, report, 4605
 air cargo services (remarks), 189
 air traffic patterns for IFR and VFR aviation, 17740
 air transport—
 industry development (remarks), 186
 possible impact of Transportation Department (address), 17449
 air transport services, agreement with—
 Austria, 2905
 Peru, 2912
 Union of Socialist Republics, 5552
 air transportation facilities, Rapid City, S. Dak. (remarks), 12097
 airman's information manuals, 3020-23, 10976-978
Army aviation—
 digest, 3996
 meteorology applicable, technical manual, change, 7390
 utilization, field manuals, 4203, 15935
 aviation news (periodical), 3257, 9440
 aviation radio services, FCC rules and regulations, 3275
 chart updating manual, 3212
 chronology on science, technology, and policy, 1441
civil aviation—
 accidents, briefs (periodical), 7518, 13014
 accidents, summary reports (periodical), 3923
 Government publications, list, 7059
 oxygen equipment, physiological protective efficiency, techniques for evaluating, development, 15979
 code of Federal regulations, 7977, 9462-63
 communications and pilot services, ATS handbook, 2991
 demand and airport facility requirement forecasts through 1950 for large air transportation hubs, 15904
 divisional aviation battalion and group, Army field manual, 10259
 education services and resources, list, 9438
 FAA statistical handbook of aviation, 4756
 Federal aviation act, coordination of unlike modes of transportation (remarks), 1598
 Federal aviation act of 1958—
 enforcement procedures, regulations, 10986, 14001
 rule making procedures, FAA regulations, 1039, 12489
 Federal aviation regulations, 1038-41, 2234-37, 4757-59, 6238-41, 7947-51, 9441-44, 10986-11005, 12488-498, 14006-11, 15237-238, 16551-557, 17743-746
 status, 12501
 general aviation accidents, small fixed-wing aircraft, briefs (periodical), 3063
 international notams, 3437, 9445
 joint financing of air navigation services in Iceland, agreement with other governments, 7158
 memorandum for aviators, 3548
 naval aviation news, 3605
 naval aviation safety review, 3036

Aeronautics—Continued
 news of Soviet aviation and cosmonautics, 1311
 notice to aviators, Navy, 3640
 index, 9967
 oxygen in general aviation, 4250
 PACAF basic bibliography, 4169
 Pacific airman's guide and chart supplement (periodical), 3668, 12500
 partial revision of radio regulations, with additional protocol—
 report, 13726
 text, 7772
 personnel, training program, establish, study, 16480
 problems in aviation meteorology, USSR studies, 1335
 research and development policy, hearings, 7790
 research, investigation—
 authorization, report, 7671
 expenses, report, 10554
 rules of practice in economic proceedings, CAB procedural regulations, 7520
 speaking of space and aeronautics (series), 2733-34, 5280-81, 9932, 17022, 18059
 survey, Air Force Academy Library bibliography, 10207
 United States activities, annual report, 5994
 weather procedures, handbook, changes, 4188, 16548
 see also Flight—also certain headings beginning Air.

Aeronautics and Space Administration, National, see National Aeronautics and Space Administration.

Aeronomy, polar region studies, USSR, 8277

Aerophotography, see Aerial photography.

Aerosols:
 bacteriological, microbiological studies, 11290
 bacteriologic evaluation, man in oxygen-helium atmosphere, 84
 radioactivity, filter pack technique for classifying by particle size, 10017

Aerospace, see Outer space.

Aerospace biology, see Biology.

Aerospace maintenance safety, 2992

Aerospace medicine, see Medicine.

Aerospace Research Office:
 directory of key staff offices and laboratories, 7334
 general information, 11968
 index of research results, 17342
 monograph series, 15890
 OAR Research Applications Conference, proceedings, 7337
 OAR series, 7335-37, 15888-889, 17342
 research objectives, 1967, physical sciences, engineering sciences, environmental sciences, life sciences, 7336
 research resumés, 15888
 research review (periodical), 3827
 Aerospace safety (periodical), 2993
 Aerospace vehicles, see Spacecraft.

Aesthetics, and national interest (address), 12462

AET, mechanism of action of AET, protection of DNA against ionizing radiation by GED, 5713

AFCLR, see Air Force Cambridge Research Laboratories.

AFDC, see Families—Public assistance.

Afens, Wilbur A., flammability properties of hydrocarbon fuels, 17094

Afferent nerves, see Nervous system.

Afflicting the comfortable, 18140

Afghanistan:
 agricultural commodities, agreement, 17227
 capsule facts for Armed Forces, 15909
 mineral industry, minerals yearbook chapter, 6642
 technical cooperation agreements, 5532, 7164, 15768

AFI-CIO, see American Federation of Labor-Congress of Industrial Organizations.

INDEX 1967

AFOSR, see Air Force Office of Scientific Research.

Africa:

- African national developments, 4154
- agricultural situation—
 - midyear reviews, 991, 16494
 - 1966 review and 1967 outlook, 10924
- contributions to hydrology of Africa and Mediterranean region (series), 11189
- development lending, investigation, authorization, report, 7718
- East, establishing business in, 4444
- labor digests, 8316
- market profiles, 14880
- mineral industry—
 - minerals yearbook chapter, 12805
 - regional review, minerals yearbook chapter, 12812
- northwest, sailing directions, changes, 7001, 17071
- problems and prospects, bibliographic survey, 13296
- southeast coast, sailing directions, change, 9970
- southwest coast, sailing directions, change, 18096
- sub-Sahara, selected functional bibliography, 17210
- translations, 3949
- west coast—
 - lights and fog signals, list, changes, 1538, 5333, 11643, 18100
 - tide tables, 12120
- see also South Africa.
- Africa and Madagascar, Agency for Safety of Air Navigation in, see Safety of Air Navigation in Africa and Madagascar Agency.
- African swine plague, see Swine plague.
- Africans, tumors in alimentary tract, symposium, 14632
- AFSC, see Air Force Systems Command.
- Afterbodies, Project Mercury spacecraft flight test aerodynamic heating data compared with prediction methods, 14372
- Agar:
 - acetate differential, comparison with Sellers citrate-mannitol-agar, 10233
 - concentration in counting Clostridium colonies, 17346
- Agate Fossil Beds National Monument, general information, 18090
- Age:
 - binocular fusion time, pilot vision considerations, effect of age, 4253
 - discrimination in employment—
 - prohibit, hearings, 9325
 - State laws, summary, 5050
- Age of transition, rural youth in changing society, 17305
- Aged:
 - aging (periodical), 2995, 14732
 - aid for the aged, recommendations, message from the President, 12198
 - charges for care in institutions, 17169
 - consumer interests of the elderly, hearings, 9300
 - declaration of objectives for older Americans, is your community ready?, 10145
 - FHA mortgage insurance on housing for elderly, 6427
 - health insurance—
 - conditions for coverage of independent laboratories, 5502
 - extended care facilities—
 - directory, 15738
 - manuals, 5504, 7120
 - home health agencies, directory, 11793
 - home health agency manual, revisions, 8687, 18206
 - hospital manual, 10084
 - hospitals, directory, 11794
 - initial operating data, 5515
 - provider costs under medicare, reimbursement, principles, 5503

Aged—Continued

- health insurance—continued
 - services by hospital-based physicians under medicare, reimbursement principles, 7119
- health insurance for the aged, HIM (series), 5502-4, 7119-20, 8687, 10084, 18206
- health records system for nursing homes and homes for aged, organizational guide, 7072
- health services—
 - housing for the elderly, Dexter Manor story, 5456
 - older Americans, costs and delivery hearings, 17633
- housing—
 - loan program, information for applicants, 16712
 - minimum property standards, 9582
 - program for senior citizens in Nation's Capital, 11593
 - rental & co-op, loans for senior citizens in rural areas, 10194
 - senior citizens, loans through nonprofit corporations, 2383
- income-tax treatment—
 - analysis of H.R. 5710, 6048, 16346
 - revise, hearings, 7763, 10684
- medical care, social security—
 - amendments of 1965 enable District of Columbia to participate, hearings, 10645
 - amendments of 1967—
 - hearings, 15154, 16409
 - reports, 14953, 14964
 - summary, 15053
- medical insurance, extend deadline for enrollment—
 - law, 16142
 - report, 16264
- medicare—
 - almost 657 important information, 5510
 - hospital and medical insurance, 5511
 - meeting challenge of later years, guide to community action for senior citizens month, 1967, and year-round activity, 8802
 - middle-aged and older people, patterns of living and housing, 14634
 - needs for services revealed by Operation Medicare Alert, 937
 - net worth, 17200
 - new day for the older American, selected papers, 10146
 - nursing and personal care homes, employees, number, work experience, etc., 7098
 - nursing care of the aged, bibliography, 10056
- older Americans act of 1965—
 - amend, hearings, 17669
 - amend, report, 914
 - amendments of 1967—
 - hearings, 12423, 15023
 - law, 13528
 - reports, 12272, 13809
- older volunteers in Peace Corps, 5381
- planning for the later years, 18207
- population of United States, social security survey, 18120
- rent supplement program, effects, hearing, 13338
- retirement housing, western style (address), 17843
- rural county cares for its aging, story of Aitkin County, Minn., 4082
- social security—
 - increases, reduction of retirement benefits—
 - hearings, 10798
 - report, 15144
 - special benefits for people 72 or over—
 - brief explanation, 2873
 - during last quarter of 1966, brief explanation, 10086

Aged—Continued

VISTA, at my age? 10914
see also Aging.
 Aged, Special Committee on, Senate, hearings, 17633
 Agee, Frank L., Jr., equidistance judgments in vicinity of binocular illusion, 139
 Agee, H. R., ultrasonic speaker for studies of acoustic sensitivity of tympanate moths, 4063
 Agents, *see* Spacecraft.
 Agency for International Development, *see* International Development Agency.
 Agents, *see* Foreign agents—Manufacturer's agents.
 Ageton, Robert W.:
 deep mine stress determinations using datjack and borehole deformation methods, 6676
 stress ellipsoid determination, in rock-burst-prone area at 4,000 foot depth, Helena mine, Wallace, Idaho, 14351
 Aggregates:
 coarse, crushed limestone, 3- and 6-in. maximum size, contained in mass concrete, comparison of properties, 4745, 6216
 larger than 1½ inch, testing, 6215
 mineral industry, Denver, Colo., area impact of urbanization, 6637
 urbanization and mineral aggregate industry, Tucson, Ariz., area, 5105
 Aging:
 developments, 1966, report, 7789
 Federal financial assistance for projects in aging (series), 13192-194
 national conference of State executives, selected papers, 10146
 patterns for progress in, case study (series), 4082
 USSR theories, 4942
see also Aged.
 Aging Administration:
 research, demonstration, and development grants, 13192
 training grants, 13193
 Aging, Special Committee on, Senate:
 committee prints, 937, 2104, 15144
 continuing authority, etc., report, 4614
 hearings, 2103, 9300, 10798, 13838
 report, 7789
 Agostino, Rosa, relief, 9240, 13504, 13595
 Agostoni, E., forces deforming rib cage, 10238
 Agreement on tariffs and trade, *see* General agreement on tariffs and trade.
 Agreements (Industrial), *see* Industrial agreements.
 Agricultural adjustment act, *see* Agriculture.
 Agricultural attache, his history and his work, 1084
 Agricultural chemicals, *see* Chemicals.
 Agricultural colleges, work of higher learning institutions in Soviet Union and German Democratic Republic, 6572
 Agricultural commodities, *see* Agricultural products.
 Agricultural commodity graders, *see* Graders.
 Agricultural Conservation and Stabilization Service, aerial photography status maps, 15833
 Agricultural conservation program:
 forestry accomplishments, 1957-64, southeastern Ohio, 14135
 national bulletin, 7256
 progress, 1966 highlights, 14757
 summary, 1966 fiscal year, 5620
 Agricultural credit:
 Bankhead-Jones farm tenant act, amend—law, 500
 reports, 910, 16368
 farm loan act, amend, report, 15130
 farm loan act, etc., text, 1983
 farm real-estate credit, analysis of borrowers and lenders, 2170

Agricultural credit—Continued

sources of funds to meet farm credit needs (remarks), 1069
see also Loans—Production credit associations.
 Agricultural economics, *see* Agriculture.
 Agricultural education, *see* Agriculture.
 Agricultural experiment stations, State, professional workers, 5622
see also names of particular stations, e.g. Alaska Agricultural Experiment Station.
 Agricultural extension specialists, examination announcement, discontinuance notice, 10422
 Agricultural extension work, *see* Agriculture.
 Agricultural finance, *see* Agriculture.
 Agricultural hydrology, *see* Hydrology.
 Agricultural implements, *see* Farm implements and machinery.
 Agricultural insurance:
 crop insurance—
 fieldman and supervisor, examination announcement, amdt., 5921
 statutes, compilation, 7262
 see also Hall insurance.
 Agricultural laborers, *see* Farm labor.
 Agricultural machinery, *see* Farm implements and machinery.
 Agricultural marketing (periodical), 2997
 Agricultural marketing specialists, examination announcement, 7534
 Agricultural outlook, *see* Agriculture.
 Agricultural periodicals, *see* Periodicals.
 Agricultural policy, *see* Agriculture.
 Agricultural products:
 acquisition and disposal of farm commodities by CCC, 19
 acreage diversion, statutes, compilation, 7262
 agricultural commodities, agreements with—
 Afghanistan, 17227
 Algeria, 2892
 Bolivia, 8723, 11838
 Brazil, 5547
 Ceylon, 1641
 Colombia, 7173
 Congo (Kinshasa), 2886, 5535, 11840
 Ecuador, 15765
 Ghana, 14684
 India, 1635, 2935, 7180, 11848, 11860
 Indonesia, 5541, 7154
 Iran, 8737
 Iraq, 11844
 Israel, 17245
 Jordan, 2888, 2917
 Kenya, 14686
 Korea, Republic, 8747, 17229
 Liberia, 2891
 Morocco, 1636-37, 7163, 7176, 8727
 Pakistan, 1640, 7166, 8744, 15772, 15793
 Paraguay, 1634
 Philippines, 8746
 Sudan, 2889
 Tunisia, 1642, 5537
 Turkey, 17228
 Vietnam, 2902, 7179, 8734, 15783, 15804
 agricultural commodity grader, career, 9356
 agricultural marketing (periodical), 2997
 agricultural prices (periodical), 2999
 agricultural trade negotiations of Kennedy round, report, 16643
 ASCS commodity offices, where they are, what they do, 13207
 ASCS production adjustment programs, 8817
 building export markets for U.S. farm products, 6361
 CCC monthly sales list, 3083
 commercial sales and exports (remarks), 7295
 commodity classification for transportation, statistics, 13352

INDEX 1967

Agricultural products—Continued
 coordination in administration of Public law 480, hearings, 955
 donated commodities, transported to State agencies, opportunities for reducing costs, GAO report, 4872
 export potential for U.S. agribusiness (remarks), 16111
 export programs, etc. (remarks), 13244
 exportation of agricultural commodities, encourage, hearing, 17589
 exports, bigger than ever in '67, general information, 8846
 Federal stockpile inventories, report, 2986
 foreign agricultural trade, monthly, 3343
 foreign commercial markets (talk), 4818
 foreign trade—
 by commodities—
 1965-66 fiscal year, 6174
 1966 calendar year, 13951
 by countries—
 1965-66 fiscal year, 10927
 1966 calendar year, 16495
 economics of foreign countries and U.S., selected list of publications, 993
 grade names used in USDA, list, 14737
 grader, examination announcement, discontinuance notice, 16076
 handbook of agricultural charts, 17306
 Japanese market, competitive position of U.S. farm products, 995
 Latin America, 20 countries, Guyana, Jamaica, and Trinidad and Tobago, indices, 4700
 long term forecasts of supply and demand in Venezuela, summary and evaluation, 12456
 market promotion of Foreign Agricultural Service, review, report, 10615
 marketing act of 1946, amend, report, 16361
 marketing act of 1946 and regulations thereunder, 9332
 marketing agreement act of 1937, amend, hearing, 712
 marketing bill—
 and its components, 6170
 for farm-food products, 987
 marketing bulletins, 15858
 marketing research reports, 34-37, 1702-4, 4120-22, 5644-53, 7276-78, 8834-36, 10179-181, 11983-935, 13228, 14751, 15859-864, 17322
 orderly liquidation of stocks of agricultural commodities held by Commodity Credit Corporation and expansion of markets for surplus agricultural commodities, 5665
 perishable agricultural commodities act—
 fair trading in fruit and vegetable industry, 13236
 what food retailers should know, 8843
 price supports, active and announced programs, 2984
 prices, 1966 annual summary, 13156
 producers, control unfair trade practices—
 hearings, 10800
 report, 15086
 production research reports, 50, 4140, 5678, 14759, 15873-874
 promote international trade, extend public law 480, etc., law, 512
 publications, price list, 7055
 purchase reports, 3789
 resale program in commercial storage, hearings, 10627
 sales reports, 3848
 Saudi Arabia, supply and demand projections to 1975, with implications for U.S. exports, 7886
 surplus, concessional sales, administration of cargo preference act, 4551
 tropical products, foreign agriculture circulars, 3345

Agricultural products—Continued
 USDA standards, list, 13215
 vegetable products, trade and tariff information, summaries, 7203
 world agricultural production and trade, statistical report, 4072
 world population needs (address), 4002
 Agricultural Research Center, Beltsville, Md:
 guide, 13204
 what it is, where it is, etc., information bulletin, 7263
 Agricultural Research Laboratory, University of Tennessee, research progress report 7425
 Agricultural research scientists:
 examination announcement, 12103
 discontinuance notice, 12106
 Agricultural Research Service:
 appropriations, 1968, hearings, 10629, 12397
 ARS series, 2-9, 1672-74, 4083-86, 5615-16, 7241-52, 8803-8, 10147-156, 11915-922, 13196-203, 14733, 15824-827, 17299-300
 cholera eradication program, controls over use of vaccines, GAO review, 9549
 research roundup 1966, picture story, 4139
 scientific careers, 17323
 plant pest control, 13229
 Agricultural science review, 3001
 Agricultural situation, see Agriculture.
 Agricultural situation (periodical), 3002
 Agricultural Stabilization and Conservation Service:
 administration of program crops certification, 7293
 appropriations, 1968, hearings, 10629, 12397
 ASCS background information BI series, 19, 5621, 8816-17, 13207
 commodity offices, where they are, what they do, 13207
 county employees, extend certain benefits to—
 hearings, 10870, 17609
 report, 13807
 general information, 8816
 press releases, 3703
 production adjustment programs, 8817
 purchase reports, 3789
 sales reports, 3848
 wheat marketing allocation program, need to further revise regulations to minimize loss to Government, 1100
 Agricultural statistics, see Agriculture.
 Agricultural supplies:
 Federal item identification guides for supply cataloging, supplements, 3290
 regional cooperatives handling supplies, 1964 and 1965, handbook, 7943
 Agricultural trade development and assistance act of 1954:
 coordination in administration of Public law 480, hearings, 955
 extend, etc., law, 512
 extension, new food aid program, 4127
 food for freedom, monthly news report on activities under PL 480, 3342
 Library of Congress Public law 480 project:
 accessions lists—
 Ceylon, 11337
 India, 3416
 Indonesia, 3419
 Israel, 8450
 Middle East, 3554
 Nepal, 3618
 Pakistan, 3673
 newsletter, 3507
 Public law 480, statutes, compilation, 7262
 text and amendments, compilation, 4463

Agricultural Weather Service, National, see National Agricultural Weather Service.

Agricultural workers, see Farm labor.

Agriculture:

- act of 1956, amend—
 - hearings, 15012
 - reports, 18683-13687
- Africa and west Asia, situation—
 - midyear reviews, 991, 16494
 - 1966 review and 1967 outlook, 10924
- agricultural adjustment act, amend—
 - hearings, 10624, 13692, 17588
 - laws, 9036, 13532, 17551
 - reports, 7666, 7782, 10574, 13804, 14948, 15127, 16274, 16369
- agricultural application of remote sensing, potential from space platforms, 15843
- agricultural/biological vocabulary—
 - alphabetical list, 17026
 - categorized list, 17025
- agricultural economic reports, 983-984, 2168-70, 6170-72, 7880-82, 9387-89, 10916-917, 12452-453, 13941-942, 16485-487, 17710-711
- agricultural economics—
 - graphic analysis, applications, 4099
 - of foreign countries and U.S. foreign agricultural trade, selected list of publications, 993
 - periodic reports, list, 10195
 - reports and publications, 1961-65, Economic Research Service, 13947
 - research (periodical), 2996
- agricultural extension programs, using visuals, 16569
- agricultural meteorology, USSR studies, 4937
- agricultural outlook digest, 2998
- agricultural policy—
 - address, 1676
 - review of programs and needs, 17124
- agricultural prices (periodical), 2999
- agricultural production, effects of climate changes, Communist China study, 9673
- agricultural research (periodical), 3000
- agricultural science—
 - in science community (address), 10160
 - review, 3001
- agricultural situation—
 - 1967, hearing, 6025
 - periodical, 3002
- agricultural trade, European Economic Community, 1959-64, statistical reference, 2174
- agriculture handbooks, 28, 1678-82, 4096-99, 5622-23, 7260-62, 10161-162, 13211-215, 14735-737, 15836-837, 17304-306
- agriculture information bulletins, 29, 1683, 4100, 5624, 7263-66, 11927, 13216-217, 14738, 15838-843, 17307-308
- agriculture monograph, 7267
- agriculture 2000—
 - communities of tomorrow (address), 8821
 - growing nations, new markets (address), 8822
 - income and abundance (address), 7268
 - knowledge for living (address), 8823
 - resources in action (remarks), 8824
 - resources in action, outline of conservation policies, 10200
 - science in service of man (address), 10163
 - speeches (compilation), 13218
- agriculture's challenge today and tomorrow, report of Secretary of Agriculture, 11942
- American, men and milestones, 2039
- assistance for developing countries, picture story, 17332
- aviators, protect, case studies, 140

Agriculture—Continued

- balance sheet, 17308
- bank financing, 12530
- bibliography, 3056
- books and periodicals, selected list, 14505
- Brazil, position in world agricultural trade, 17718
- census, 1964—
 - counties, farms, livestock, etc., 5903-4, 7499-7510, 8962-65, 10388-398, 12091-92, 13404-412, 14837-839, 16036-40, 17442
 - data-collection forms and procedures, 16041
 - final reports, 16041
 - preliminary reports, 3085
- census publications, price list, 7056
- challenge, today and tomorrow (address), 30
- chronology of American agriculture, 1790-1965, chart, 4696
- code of Federal regulations, 6267-73, 7975, 9460, 11030-32, 12516-520
- Communist Chinese scientific abstracts, 3114
- cooperation, 1954-64, selected references, 1517
- cooperative extension services in District of Columbia, establish, hearing, 16387
- creative industry (address), 13210
- decisions, 3003
- East European, translations, 3954
- economics of size in farming, theory, analytical procedures, etc., 6172
- employer-employee relationship where share-cropping arrangements or landlord-tenant agreements provide shares of crops as rental payments in farm operations, 7228
- era of dramatic change and expanding opportunity (address), 27
- Europe and Soviet Union situation—
 - midyear review, 16491
 - 1966 review and 1967 outlook, 9394
- export policy (address), 1677
- fair practices act of 1967—
 - hearings, 10800
 - report, 15086
- Far East and Oceania—
 - agricultural data book, 10926
 - situation—
 - midyear review, 16492
 - 1966 review and 1967 outlook, 12455
- Federal programs, effect on rural America
- hearings, 17583
- finance outlook, 2171
- finance review, 985
- supplement, 10918
- food and agriculture act of 1965, amend, report, 15087
- food costs, farm prices, compilation, 13694
- food needs and U.S. agriculture in 1980, analysis of land, labor and capital requirements, etc., 17122
- foreign agricultural economic reports, 995, 2176, 4702, 15209, 17714
- Foreign Agricultural Service, miscellaneous
- FAS-M series, 1084, 2286, 4816-17, 8047-48, 9524-25, 11097-99, 12565, 14076, 16641-643, 17792
- foreign agriculture (periodical), 3344
- foreign agriculture circulars, 3345
- foreign agriculture, publications, price list, 7055
- future international meetings, world list, 4073
- genetics introduced into agriculture, USSR study, 1189
- Georgia, federally assisted in programs, equal opportunity, 16061
- good farm worker housing is good farm business, 2194
- handbook of agricultural charts, 17306
- historic books and manuscripts concerning general agriculture in collection of National Agricultural Library, 8515

INDEX 1967

Agriculture—Continued

- hunger is ahead in race between hunger and hope, picture story, 17331
- Indonesia, 9393
- information services offered by National Agricultural Library and other Government agencies, 5282
- international—
 - agricultural development, monthly newsletter to cooperators, 3432
 - agricultural trade, terms used, 9524
 - new careers, 13234
- Latin American—
 - agricultural development, role of Inter-American Development Bank (remarks), 10121
 - development, food situation, report, 13701
- laws, compilation, 1986
- legislation enacted, 89th Congress, review, 4520
- meteorological and hydrological factors effects, USSR studies, 4938
- minimum wages, application, hearing, 7732
- our foreign agricultural trade, 4100
- Panama, 7887
- prospects (address), 15877
- research and marketing act of 1946, amend, report, 2020
- research roundup 1966, Agricultural Research Service programs, picture story, 4139
- scientific research coordination in Socialist countries, 7th conference, report, Hungarian study, 14242
- Senegal's agricultural economy in brief, 992
- sharing our knowledge with other nations, 12335
- slash-burn, among mountain tribes of central Vietnam, 14246
- State departments, 1967 directory, 7836
- statistical summary, 8902
- statistics, 1684
- trace elements, USSR studies, 6542
- tropical, in economy of Hawaii (address), 4093
- United States, fact book, 17324
- USSR—
 - economic reform, improvement of methods of planning and economic stimulation of production, 4961
 - translations, 3968
- Western Hemisphere—
 - agricultural policies, 17714
 - situation—
 - midyear reviews, 990, 16493
 - 1966 review, and 1967 outlook, 10925
 - work of agricultural institutions in Soviet Union and German Democratic Republic, 6572
- world agricultural production and trade, statistical report, 4072
- World Farm Center, endorse concept, 13626
- world situation, 1966 review and 1967 outlook, 4702
- worldwide use of airphotos in agriculture, 17304
- yearbook, 1967—
 - departmental edition, 17325
 - document edition, 17566
- yearbooks, list, 8620
- see also Dry Farming—Farmers' cooperative organizations—Farms—also headings beginning Agricultural—Farm
- Agriculture and Forestry Committee, Senate:
 - calendar, 3489
 - hearings, 938, 7792, 10799-802, 15145-146, 16387, 17634
 - reports, 910, 925, 2083-85, 7781-83, 10748-749, 13790, 13803-804, 15086-88, 15090, 15127-130, 16361, 16368-370
- Agriculture Committee, House:
 - calendar, 3470
 - committee prints, 2039, 4520-21, 13694
 - funds, providing, report, 7678

Agriculture Committee, House—Continued

- hearings, 707-712, 2037-38, 6025, 7732, 9138-40, 10624-628, 13691-693, 15010-13, 16301-303, 17583-589
- investigations and studies, authorization, report, 6015
- reports, 660-661, 2020, 4495, 7666, 9083, 9101, 9119, 10573-574, 13626, 13659, 13668-669, 13683, 14048, 14981, 16255, 16274-276, 16297
- travel authorization, report, 12281
- Agriculture Department:
 - activities of interest to cattle raisers (address), 7259
 - Alaska Agricultural Experiment Station, transfer to University of Alaska—
 - law, 366
 - report, 660
 - annual reports, 11940-942
 - appropriations, 1967, supplemental, hearings, 2040
 - appropriations, 1968—
 - hearings, 9141, 10629, 12397, 13839
 - law, 17558
 - reports, 10620, 13815, 16300
 - budget, 1968—
 - amendment, 10522
 - hearings, 9141, 10629
 - chemical compounds authorized for use under USDA poultry, meat, rabbit and egg products inspection programs, lists, 10578, 16445
 - contracts for diamonds for stockpile, balance-of-payments aspects, GAO report, 15293
 - economy family food plan, sample menus and food list for week, 10157
 - field staff, Foreign Service list, 3349
 - food donated for distribution abroad, problems in processing claims against voluntary relief agencies for loss or misuse, GAO report, 12589
 - food donation programs administered by nonprofit organizations, audit extent, GAO report, 8149
 - food stamp program, method for sharing our abundance, 5669
 - grade names for food and farm products, list, 14737
 - HOPE, highlights of personal experiences in Agriculture Dept. under President's Youth Opportunity Campaign, 8833
 - inspection and grading services, dairy plants surveyed and approved, 6131
 - inspection services, user charges, authorize hearing, 15146
 - institutional meat purchase specifications approved portion-cut meat products, 7838
 - amendment, 12429
 - land exchanges, accept cash equalization, report, 2084
 - leadership for more beautiful countryside, 49
 - leaflets, 32-33, 1699-1701, 4110-18, 5634-43, 7273-75, 10172-178, 11932, 14745-750, 15857, 17320-321
 - marketing bulletin, 15858
 - marketing research reports, 34-37, 1702-4, 4120-22, 5644-53, 7276-78, 8834-36, 10179-181, 11933-935, 13228, 14751, 15859-864, 17322
 - meat inspection—
 - procedures manual, 3537
 - regulations, 3514, 6132
 - miscellaneous publications, 38-42, 1705-9, 4123-26, 5654-64, 7279, 8837, 10182-186, 11936, 13229-233, 14752-753, 15865, 17323-324
 - PA [program aid] series, 43-49, 1710-18, 4128-37, 5666-77, 7281-93, 8838-45, 10188-194, 11937-938, 13235-237, 14754-758, 15866-871, 17326-330

Agriculture Department—Continued
 plants under continuous inspection, processed fruits and vegetables, etc., list, 16447
 poultry and egg inspection and grading programs, plants operating under, lists, 2137, 16446
 poultry inspection regulations, hearing, 710
 press releases, 3704
 processed fruit and vegetable inspection, 11937
 production research reports, 50, 4140, 5678, 14759, 15873-874
 programs and services, you too can get help, 14754
 programs, etc., and their application to Alaska (address), 25
 programs for elimination of poverty in rural America (statement), 7296
 progress report on pesticides and related activities, 7294
 publications and motion pictures, bimonthly list, 3058
 registered agricultural pesticide chemicals, summary of uses, supplement, 8815
 sale of land in Lander, Wyo., reports, 925, 7781
 service, USDA's report to consumers (periodical), 3873
 standards for food and farm products, list, 13215
 statistical bulletins, 53, 1720-21, 4143-50, 5679-84, 7297-7302, 8847-48, 10201, 205, 11943-944, 13247-251, 14760-762, 17333
 technical bulletins, 54, 1722-23, 4151-52, 5685-88, 7303, 8849, 11945, 13252, 14763-765, 17334-336
 telephone directory, 17337
 USDA-C&MS visual aid series, 4662, 13901
 USDA employee newsletter, 4012
 USDA grades, how to use in buying food, 5671
 veterinarians, career opportunities, 5657
 what it can do when natural disaster strikes, 10189
 what it is, and what it does (address), 4094
 wheat export program conducted by CCC, GAO review, 14759
 Agrometeorology:
 effect of agrometeorological conditions on harvest, USSR studies, 6492
 research, USSR methods and results, 6489
 United States progress, report, 11900
 Agua Caliente Reservation, *see* Palm Springs Reservation
 Aguilana, Margarita L., relief, 9204
 Ahlstrom, Elbert H., distribution and abundance of sardine and anchovy larvae in California Current region off California and Baja California, 1951-64, summary, 8038
 Aho, Paul E., defect estimation for grand fir, Engelmann spruce, Douglas-fir, and western larch in Blue Mountains of Oregon and Washington, 2289
 AIB series, 29, 1683, 4100, 5624, 7263-66, 11227, 13216-217, 14738, 15838-843, 17307-308
 AID, *see* International Development Agency
 Aid to families with dependent children, *see* Children—Public assistance
 Aidt, Dja'far N., Aidt's flight following Sept. 30 movement in Indonesia, 12679
 Aids to navigation, *see* Navigation
 Air:
 aerial dispersal of pink bollworm in U.S. and Mexico, 5678
 breathing in flight, the higher you fly the less air in the sky, 8920
 bubbles, properties at air/sea interface, influence of surface-active material, 17088

Air—Continued
 clear, turbulence in, near thunderstorms, 6222
 current velocities, electronic-mechanical method of measuring, USSR study, 1178
 differential energy and angle spectra for Cs-137 gamma rays, 13326
 embolism, cerebral, basic studies, 12793
 equilibrium composition, equations for rapid machine computation, and derivatives for flow-field calculations, 16973
 equilibrium dissociating, stagnation-point boundary layer with suction and injection, 8499
 pressures and forces on flare-stabilized bodies in air and in mixture of 85-percent CO₂ and 15-percent air, 17011
 sound absorption versus humidity and temperature, 6707
 supersonic mixing of hydrogen and air, 9507
 velocity measurements, evaluation of smoke-wire technique, 10293
 wash, grid-bar, effect on efficiency of lint cleaners and fiber quality of cotton, 14759
see also Air pollution—Atmosphere
 Air almanacs, *see* Almanacs
 Air bases:
 management of hi-valu aeronautical parts by Pacific Air Forces bases, GAO report, 8133
 planning and design, theater of operations, Air Force manual, 1727
 Air bearings, *see* Bearings (machinery)
 Air blasts, multiple row charge blast-wave observations at long range, 1798
 Air cargo comes to smaller community, 17447
 Air cargo workshop, Regional, *see* Regional air cargo workshop (periodical)
 Air carriers:
 air taxi operators—
 and commercial operators of small aircraft, Federal aviation regulations, 12498, 14008
 scheduled as of Nov. 1966, statistics, 9446
 air transport—
 California strawberries, factors affecting market quality, 1966 spring shipments, 1704
 industry and subsidy policy (talk), 7519
 services, agreement with—
 Agency for Safety of Air Navigation in Africa and Madagascar (ASECNA)
 Denmark, 7153
 Great Britain, 7152
 Panama, 15782
 Sweden, 8724
 air transportation system—
 CAB's duty and authority as to proper application of subsidy (remarks), 8971
 CAB's responsibilities (remarks), 1899
 air-truck coordination and competition, 11231
 airfreight rates, introduction, 16047
 analytical charts and summaries, including supplemental air carrier statistics, 3005
 cargo services for smaller community (remarks), 17447
 certificated—
 accounts and reports, uniform system, 3993, 8972, 13419
 local service, U.S. transportation system routes, map, 4375
 route, airport activity statistics, 7517, 16547
 subsidy, 1901
 trunkline, U.S. transportation system routes, map, 4376
 U.S. cargo, domestic, international, and overseas routes, map, 4377

INDEX 1967

Air carriers—Continued

certification and operations, Federal aviation regulations, 2237, 14007, 16556
 challenge of jet age (remarks), 13420
 district offices, standard procedure for uniform reporting, handbook, 14012
 efficient surface transportation and air cargo services (remarks), 5911
 financial statistics—
 quarterly and 12-month, 3006
 supplement, 3005
 flight engineer, written examination guide, 2282
 foreign routes, to U.S., authorized under permit, map—
 Eastern Hemisphere countries, 4373
 Western Hemisphere countries, 4374
 international and overseas routes, map, 4372
 international transportation, unification of rules, convention amendments, withdrawal of treaty, text, 15064
 labor dispute, settlement—
 hearings, 959
 report, 874
 local services, unit costs, 1897, 13418
 maintenance, certification procedures, FAA handbook, 10981
 marvels and problems of air transportation (remarks), 1900
 military, freight preparation for air shipment, DSA manual, 17692
 passengers originating at cities on local-service routes, letter to mayors, 3937
 regional air cargo workshop (periodical), 3813
 scheduled, with helicopters, certification and operations, Federal aviation regulations, 6240, 12497
 service personnel on authorized leave, accommodations of commercial carriers, subcommittee report, 4325
 shadow box optical landing system, 11680
 small business role in air transportation industry, report, 4511
 traffic statistics—
 monthly and 12-month, 3007
 supplement, 3005
 transportation of dangerous articles and magnetized materials, Federal aviation regulations, 10998-999
 transportation industry, present traffic and profits to serve public need (address), 17445
 United States carriers, lists, 5909, 13417
 Air Cleaning Conference, AEC, Boston, Mass., Sept. 13-16, 1966, proceedings, 12004
 Air commerce, see Aeronautics.
 Air compressors, see Compressors.
 Air conditioning:
 equipment—
 current industrial reports, 5853
 Federal item identification guides for supply cataloging, supplements, 3288
 Air crews, see Flight crews.
 Air-cured tobacco, see Tobacco.
 Air cushion vehicles, lightweight fans, structural design techniques, 117
 Air drop operations, airdrop of supplies and equipment, Army technical manuals, 112, 1771, 4217, 7398-99, 8887-89, 10280-281, 12303, 15940-952
 Air elutriation, see Elutriation.
 Air Force:
 Air Force civil engineer (periodical), 3008
 Air Force Systems Command, general information, 14783, 17364
 Air Force writing (periodical), 3010
 air navigation, general information for navigators, etc., manual, 1724
 Air Staff, organization chart, 3012
 airman, official magazine of Air Force, 3010
 airmen—
 occupational handbook, manual for guidance counselors, 15902

Air Force—Continued

airmen—continued
 qualifying examination, comparison with differential aptitude tests, errata, 4171
 base procurement mechanization system, manual, 10211
 benefits for dependents and survivors of Air Force casualties, personal affairs pamphlet, 13259
 career opportunities, jobs that count, 10223
 Chief of Staff, appointment, etc.—
 law, 12164
 report, 10811
 communications officers, job types, 15892
 comptroller (periodical), 15879
 depot, field, and organizational maintenance, management, manual, change, 14767
 depth perception tests, stereoscopic angle relationship, 70
 drill and ceremonies, manual, 8851
 driver, automotive magazine, 11949
 employment of military retirees as civilians, law, 5697
 enlisted members, computing retired pay, report, 16270
 enlistees, dental caries status, 7353
 field press censorship, manual, 13293
 food service management, manual, 8857
 hearing survey of flying personnel, 17356
 instructors journal, 4011
 job analysis, impact of computer, 13268
 libraries, buying calendar for annual publications, 8859
 materiel, validity and controls over large volume of unfilled orders, GAO review, 17813
 military standard, digital computer systems for real-time training simulators, 9373
 of flight and bold men, 3704
 officers—
 grade requirements project, Criterion Board ratings, predicting, 15891
 position evaluation, development of benchmark scales, 5705
 qualifying test, relationship of scores to success in undergraduate pilot and navigator training, 13267
 Pacific bases, management of hi-value aeronautical parts, GAO report, 8133
 Pacific, PACAF basic bibliographies, 4169, 7338, 8866-67, 10227-230, 11950, 13296
 personnel, automobile accidents, prediction, 17344
 procurement instruction, revisions, 3009
 Project LITE (legal information through electronics), management, hearing, 15034
 register—
 departmental edition, 5699-5700
 document edition, 5983-84
 research and development procurement—
 contracting, officers' handbook, 13260
 laboratory policies and practices for procurement management, pamphlet, 13261
 research resumés, 15888
 science and Air Force, history of AFOSR, 7335
 Scientific Advisory Board, first 20 years, 11969
 scientific research 1960, bibliography, 7304
 sites, engineering weather data for heating, air conditioning design, etc., 11947
 tactical air operations—
 and readiness, subcommittee report, 2106
 southeast Asia, report, 10813
 USSR, test airfield, 16738
 weather forecaster proficiency, test correlates, 8863

Air Force Academy, Colo.:
cadets, class of 1967, predicting 1st year achievement, 17343
catalog, 10208
general and engineering geology of site, 11179
ground water supply relative to geology, engineering, etc., 11179
permitting persons from countries friendly to U.S. to receive instruction—
law, 506
report, 692
special bibliography series, 5689, 10206-207
Air Force Cambridge Research Laboratories: AFCL series, 4153
geophysics and space data bulletin, 3377
Air Force Department:
Aerospace Research Office monograph series, 15890
aerospace vehicles, information handbook, 15882
AFCL series, 4153
AFOSR series, 7304, 14766, 15878
Air Force manuals, 55-61, 1724-29, 4155-65, 5090-95, 7305-15, 8850-57, 10209-221, 11946-947, 13254-256, 14767-768, 15880
Air Force pamphlets, 5696-98, 7316-17, 8858-59, 11948, 13257-259, 15881-882, 17338
annual report, 2149
appropriations, 1968, military construction, hearings, 16305
Assistant Secretary, nomination of Thomas H. Nielson, hearings, 17639
cancellation of grazing permits, compensate claimants, 4576
communication facilities between Alaska and U.S. mainland, economical use, GAO report, 15301
ESD technical reports, 62-65, 4166, 8861-64, 13262
lunar charts and mosaic series, 4167-68, 7319-33, 8865, 10224-226, 13263, 15886-887
management of hi-valu aeronautical parts by Pacific Air Forces bases, GAO report, 8133
OAR series, 7335-37, 15888-889, 17342
Personnel Research Laboratory, technical reports, 4170-72, 5705, 7339, 11951-952, 13267-268, 15891-893, 17343-345
procurement of missile fuel from sole-source supplier, GAO review, 9551
Under Secretary, nomination of Townsend Hoopes, hearing, 15149
validity and controls over large volume of unfilled orders for Air Force materiel, GAO review, 17813
Air Force Installations, see Installations (military)
Air Force Medical Service:
annual report, 8870
digest, 3994
Air Force Office of Scientific Research:
AFOSR series, 7304, 14766, 15878
history, 7335
research, program and summary of accomplishments, 15878
Air Force Reserve, air reservist (periodical), 3011
Air Force ROTC, see Reserve Officers Training Corps, Air Force
Air Force supplies, see Military supplies.
Air Force Systems Command:
general information, 14783, 17364
manuals, 5701-2
pamphlets, 10222, 13260-261
procurement, work statement preparation, manual, 5701
systems acquisition, guide for effective change processing, 10222
Air frames, see Airframes.
Air freight forwarders, see Freight forwarders.

Air inlets (aircraft):
axial-flow-compressor-inlet stages under high loading, aspect ratio and curvature variations, 9916
choked, flow characteristics for turbojet engine, 11499
convergence nozzles, with uncooled pipe inlets, heat transfer investigation, 17005
perforations in jet engine supersonic inlet increase shock stability, 2655
rotor-inlet flow conditions, control by guide vanes, 5275
supersonic mixed-compression, analysis of bypass air control system, 12946
supersonic transport inlet sensitivity study, 8496
Air jets, model, influence of upstream flow discontinuities on acoustic power radiated, 6714
Air lines, see Air carriers.
Air mail:
Armed Forces, provide additional mailing privileges—
hearings, 10870
report, 10613
Hawaii, transport of all classes of mail by air, hearing, 9166
international 13-cent postal card, 14607
overseas Armed Forces, provide better service, law, 438
13-cent John F. Kennedy aerogramme (poster), 10025
Air mass:
microorganisms—
in 2 types of air masses at 690 meters over a city, 66
of land air mass as it traverses ocean, 68
Air National Guard, see National Guard.
Air navigation:
Air Force manual, 1724
facilities—
interagency ground inspection manual, 16559
non-Federal, FAA regulations, 14011
outage and equipment failure report, FAA handbook, 10983
rules governing, FAA regulations, 11004
flying training, Air Force manual, 13254
Iceland, joint financing of services, agreement with other governments, 7158
navigable airspace, objects affecting, Federal aviation regulations, 15238
navigator (periodical), 3612
pictorial display in instrument departures of supersonic transport, simulator study, 12944
Air Navigation in Africa and Madagascar, Agency for Safety of, see Safety of Air Navigation in Africa and Madagascar Agency.
Air pilots, see Aviators.
Air pollution:
Air Cleaning Conference, AEC, Boston, Mass., Sept. 12-16, 1966, proceedings, 12004
air quality—
act—
address, 8640
hearings, 10871, 12426, 15043
reports, 13821, 16286
criteria for sulfur oxides, 11715
data, from national air sampling networks, etc., 8624
management, case study of St. Louis air pollution basin (paper), 11716
automobile and air pollution, program for progress, 17470
automotive—
problems and progress associated with control, hearings, 10871
report of HEW to Congress, 761, 6056, 16348
print as Senate document, reports, 6083, 15142
bibliography, 2805

INDEX 1967

Air pollution—Continued
carbon-bearing contaminants, models for analysis of radiation behind shock waves, 9905
clean air—
for your community, problems, solutions, etc., 2809, 11722
plan, Greenspan grants, general information, 5672
clean air act, amendments—
Dec. 17, 1963, text, 5425
hearings, 12426, 13556, 15043
law, 393
reports, 13821, 16286
community air pollution emissions, rapid survey technique for estimating, 7062
control—
bulletin of courses, 18153
Federal role (address), 13072
from automotive vehicles, Federal standard, 6324
now for clean air, national conference proceedings, summary, 14620
programs, appropriations, authorize, law, 393
State and local programs, 2838
controlling devices and laws necessary (remarks), 5446
District of Columbia, problems, hearings, 10829, 16318, 16406
effects, 5427, 5441, 13071
emissions from tepee burners used for municipal refuse disposal, 1572
environmental health series, 1572, 5428, 7062-63
environmental pollution, challenge to science and technology, report, 2057
Federal program, 5431
films on loan for group showing, list, 13075
flame characteristics, production of nitrogen oxides and carbon monoxide, 8378
impact of pollution abatement regulations on industry and municipalities (address), 1580
industry's responsibility in controlling (address), 8636
interstate study, phase 2 project reports, 5438-42, 11739
laws, compilation, 4547
meteorology and topography, result of surveys, 11739
metropolitan planning program relationships to air resource management, 13084
microorganisms—
in 2 types of air masses at 690 meters over a city, 66
of land air mass as it traverses ocean, 68
national sample, 1566
nitric acid manufacturing processes, emissions, 5428
no laughing matter, cartoonist focuses on air pollution, 5450
odors, results of surveys, 5440
pollutant emission inventory, 5439
pollution of our air, problems, message from the President, 5992
relationship between—
altitude and micropopulation, 1733
frontal activity and micropopulation at altitude, 1732
research, projects 1966, guide, 2813
resource management program for southwestern Ohio-northern Kentucky, survey, 11717
sources, and their control, 2837
State laws, digest, 1565
studies, progress report of Organic Chemistry Section, 18081
take 3 giant steps to clean air, 2821, 11731
today and tomorrow, 2840
training programs, courses offered at universities and Division of Air Pollution, 2806

Air pollution—Continued
vehicle emissions, control progress (address), 2836
West Virginia, climatological aspects, 6219
Air Pollution Control Advisory Council of D.C., create, hearings, 16406
Air Pollution Control Board of D.C., create, hearings, 16406
Air Pollution Control, National Center, see National Center for Air Pollution Control.
Air Pollution, National Conference on, see National Conference on Air Pollution.
Air purification equipment, industrial plant equipment handbook, 4674
Air Quality Advisory Board:
establish—
hearings, 10871, 12426, 15043
reports, 16286
Air raids:
North Vietnam, bombings of civilians by U.S., reports by pro-Communist eyewitnesses, 4955
use of plotters in East German air defense system, 2437
Air reservist (periodical), 3011
Air routes, see Airways.
Air safety, see Safety of life.
Air samplers:
automatic sampler for collecting radioactive particulates in ground level air, 1788
cleanroom, counts, categorizes, and records particle size, 14409
instrumentation for isokinetic air sampling at altitude, 67
Air service, see Aeronautics—Air carriers.
Air speed:
hypersonic aerodynamics of minimum-wave-drag bodies, etc.—
characteristics, 16971
performance, 1515, 12968
maneuver speed increases on SST configuration in relation to speed margins, simulator investigation, 16972
pitch maneuver speed margins for supersonic transport configuration with variable-sweep wing, investigation, 17000
radiative heat transfer for large objects at meteoric speeds, 12958
Air taxi operators, see Air carriers.
Air terminals, see Terminals (transportation).
Air traffic:
activity—
FAA report—
1966, calendar year, 6235
1966, fiscal year, 1037
1967, fiscal year, 16550
miscellaneous statistics, 7952
air carrier statistics—
monthly and 12-month, 3007
supplement, 3005
control—
contractions used by FAA, etc., handbook, changes, 5716, 13273
en route, 13274, 14784
facility operation, 7371
interagency ground inspection manual, 16559
procedures, changes, 3013
terminal, 13276, 14785
facility outage and equipment failure report, FAA handbook, 10983
navigable airspace, objects affecting, Federal aviation regulations, 10994, 15238
patterns for IFR and VFR aviation, 17740
special rules and airport traffic patterns, Federal aviation regulations, 10996, 16555
Air traffic controllers:
center, tower, station, control specialists, examination announcement, 16064
performance tasks for operator-skills research, 1821

Air Traffic Service:
 service A weather schedules, ATS hand-
 book, changes, 5717, 11971
 service C, weather schedules, 1746
 change, 11972
Air transportation, see Aeronautics—Air
carriers—Transportation.
Air-truck coordination and competition,
 11231
Air University Library, index to military
periodicals, 3014
Air University review, 3015
Air warfare:
 air war against North Vietnam, hearings,
 16394
 USSR air defense troops, 6569
Air Weather Service, technical reports, 7318,
8860, 15883-884, 17339
Airborne Tactical Data Center Training, com-
bat team training, 18109
Aircraft:
 aircraft and aircraft engines, current in-
 dustrial reports, 3169, 13389
 aircraft and equipment, transfer, agree-
 ment with Saudi Arabia, 2926
 aircraft specifications, consolidated re-
 print, 15236
 airworthiness—
 FAA directive (periodical), 9439
 FAA directives, biweekly, 3256
 alterations, acceptable methods, tech-
 niques, and practices, 2981
 changes, 9521, 16638
 and birds, Midway Islands, 1959-63 in-
 vestigations, 4809
Army—
 air transport operations, 11986
 aviation maintenance engineering man-
 uals, 4218, 7400, 10282
 fixed wing cargo, restraint design cri-
 teria, analysis, 10289
 maintenance quality control and tech-
 nical inspection guide, technical man-
 ual, 8893
C-47 aircraft, agreement with Mall, 11873
certification procedures for products and
parts, Federal aviation regulations,
6238, 10987-988
 civil aircraft registers, 7953, 17749
 civil, technical standard order authoriza-
 tions, FAA regulations, 9443, 17744
Coast Guard, authorization for procure-
ment—
 hearings, 7752, 10827
 law, 13524
 reports, 10556, 12378
COIN-type STOL, flight investigation,
15572
 components and accessories, Federal item
 identification guides for supply catalog-
 ing, supplements, 3293
 control, master data handling program
 uses automatic data input, 16940
 data for airplanes in common use in civil
 fleet, airport design, change, 13999
 data, thunderstorm circulations and tur-
 bulence studies, 10966
 DeHavilland, damping behavior of stem
 booms, 11539
 Douglas DC-6/7 series, maintenance in-
 spection notes, 17747
 emergency procedures over water, 3016
 environments, respiration rate transducers,
 development, 18044
 fabrication techniques for fiber glass rein-
 forced primary aircraft structures, 4222
 Federal item identification guides for sup-
 ply cataloging, supplements, 3293
 fire and rescue truck, 1000-gallon, guide
 specification, 10246
 flight testing, theoretical principles and
 modern methods, 8509
 flotation of passenger seat cushions, 137
 fuels and fuel systems, Coordinating Re-
 search Council handbook, 11624

Aircraft—Continued
 general aviation—
 handling qualities, evaluation, 1514
 shoulder restraint installation, recom-
 mendations, 7446
 general operating and flight rules, Federal
 aviation regulations, 1041, 2236
 hardware and materials, Army aviation
 maintenance engineering manual, 8892
 icing, climatological probability, 7318
 inspection aids, general aviation, 3373
 summary, 15269
 inspection and repair, acceptable methods,
 techniques, and practices, 2982
 jet, wide-angle, indirect optical viewing
 system, 1497
 large airworthiness directives, summaries,
 3917, 12502, 17748
 large, commercial operators, certification
 and operations, Federal aviation regula-
 tions, 2237, 14007, 16556
 light-aircraft pilots, non-instrument-quali-
 fied, performance during instrument
 flight, simple stability augmentation sys-
 tem, effects, 11519
 light, fluid flight path control system,
 study, 16890
 Mach 6 cruise vehicles, integration of air-
 frame and propulsion system, 18010
 maintenance—
 certification procedures, FAA handbook,
 10981
 tools, Army technical manual, 4218
 Marine Corps, 1913-65, utilization, 17905
 military—
 aircrew station vision requirements,
 military standard, 16470
 flight manuals, prototype specification
 development, 2784
 transportation of dangerous materials,
 Air Force manual, change, 13255
 military procurement appropriations,
 1967—
 report, 2014
 supplemental—
 hearings, 6031, 7799
 law, 9035
 reports, 6087, 7665, 7667, 7673
 military procurement appropriations,
 1968—
 hearings, 7797, 9149
 law, 12164
 reports, 7786, 10570, 10575, 10611
 model, pitching moments caused by tail,
 equations for application of wind-tunnel
 wall corrections, 2715
 noise—
 insulating houses, study, 14188
 multiengine jet transport, noise-abate-
 ment approach profiles, NASA re-
 search, 12956
 propagation of sound from airport
 ground operations, 11404
 references, 4753
 optimum body shapes at hypersonic speeds,
 studies, 18024
 oxygen mask designs for general aviation,
 performance characteristics, 17412
Paris Air Show—
 news fillers, 8225
 newsletter, 8226
 passenger-seat-system response to im-
 pulsive loads, 17388
 pressurized, small, potential decompression
 hazards, evaluation, 17414
 Princeton dynamic model track, general
 description, 7409
 production, miscellaneous statistics, 7952
 registration, Federal aviation regulations,
 10990, 15237, 17746
 repair parts, Army Dept. management at
 depots in U.S., GAO review, 9555
 restraint systems, functional comparison,
 17413
 shop practices, Army technical manual,
 7400

INDEX 1967

Aircraft—Continued

- slender wing-body combinations exhibiting leading-edge separation, aerodynamics, theoretical investigation, 8415
- small, air taxi operators and commercial operators, Federal aviation regulations, 12498, 14008
- small, airworthiness directives, summary, 3918, 11007, 16562
- structures, fatigue, 17062
- supersonic—
 - human operator response speed, etc., review, analysis and device demonstration, 16904
- jets, prediction of near field noise, 14400
- transport, high-energy fuels for reserves, 11532
- supplemental type certificates, 3921
- time-lapse photography, using for cloud measurements, 10967
- titles and security documents, recording, Federal aviation regulations, 7948, 14004
- transport—
 - gas-turbine units, friction and leakage losses in blade-rings, 5277
 - simulator and flight study of yaw coupling in turning maneuvers, 11494
 - V/STOL concepts, feasibility for short haul, study, 5171, 12851, 16920
- type certificate data sheets and specifications, 3018, 12487
- United States—
 - civil, census, Dec. 31, 1965, 16549
- Navy aircraft, lithographs, 11650
- V/STOL—
 - height control requirements for hovering and low speed flight under visual conditions, 11524
 - longitudinal aerodynamic characteristics in ground effect of large-scale model with tilting ducted fans arranged in dual tandem configuration, 18045
 - tilting wing configuration with left and right-hand rotating of propeller, aerodynamic data, 6855
 - tilting wing, large semispan, with 0.5-diameter chord, etc., aerodynamic data, 9879
- variable-stability transport influence of response feedback loops on lateral-directional dynamics, 11516
- VTOL—
 - flight patterns, medico-physiological incidences on pilot, 11563
 - free stream interference effects on effectiveness of control jets near wing tip of model, 14478
- jet-ejector system for lift augmentation, wind-tunnel investigation, 2706
- models in wind tunnels with 7 by 10 proportions, tables of interference factors for use in correcting data, 9825
- wing body combinations, cranked leading edge, aerodynamic characteristics, 18039
- XV-9A hot cycle research, 20-hour follow-on flight program, summary report, 7410
- see also Air carriers—Airplanes—Fighter planes—Flight—Landing (aircraft)—Sonic boom—Spacecraft—Stall (aircraft)—also names of aircraft parts, e.g. Propellers.

Aircraft accidents:

- civil aviation—
 - briefs (periodical), 7518, 13014
 - summary reports (periodical), 3923
- crash protection padding materials, evaluation of various types, 5803
- crash survival design guide, 13309
- emergency evacuation tests of crashed L-1649, 10321
- firefighting and rescue vehicles, engineering observations, 9999

Aircraft accidents—Continued

- full-scale fire modeling test studies of light water and protein type foams, 17092
- general aviation, small fixed-wing aircraft, briefs (periodical), 3063
- impairment of airmanship by alcohol, 4251
- incident investigation and reporting, FAA handbook, 4755
- injury potentials of light-aircraft instrument panels, 1820
- investigation reports, 4369-70, 10404, 17059-60
- low-level operational hazards, 4223
- smoke hood to protect passenger, aviation medical report, 14812
- stall barrier as new preventive, 1823
- visual illusions, 11958
- Aircraft carriers:
 - altitude rate command system for aircraft landings, 9997
 - outfitting, procurement of spare aircraft parts, potential savings, Navy Dept., GAO report, 8136
- Aircraft engines, see Engines (aircraft).
- Aircraft repair station, Federal aviation regulations, 9444
- Aircrew station vision requirements for military aircraft, 16470
- Aircrews, see Flight crews.
- Airdrop operations, see Air drop operations.
- Airfields, see Aviation fields—Heliports—Pavements.
- Airfoils:
 - circulation control, by means of jets, investigation, 7408
 - leading edge heat transfer, effects of shock-wave impingement, 6896
 - static 2-dimensional data, comparison with chordwise pressure distributions measured in flight on helicopter rotor blade, 11502
- Airframes:
 - integration with propulsion-system for Mach 6 cruise vehicles, 18010
 - structural components, Federal item identification guides for supply cataloging, supplements, 3293
- Airlift, see Transportation.
- Airlines, see Air carriers.
- Airmen:
 - airman jobs, merited grade versus merited pay rankings, 7339
 - airman's information manuals, 93, 3020-23, 10976-978
 - international notams, 3437
 - job-satisfaction, follow-up survey, 10241
 - jobs, comparison of merited grade and skill level ratings, 4172
 - maintenance certification procedures, FAA handbook, 10981
 - miscellaneous statistics, 7952
 - occupational handbook, manual for guidance counselors, 15902
 - other than flight crewmembers, certification, Federal aviation regulations, 2235, 10983
 - Pacific airman's guide and chart supplement (periodical), 3668, 12500
 - performance in administrative career ladder, describing by identifying patterns of trait ratings, 11952
 - see also Aviators—Notice to airmen.
- Airplane mechanics, see Mechanics (persons).
- Airplanes:
 - airworthiness standards—
 - normal, utility and aerobatic category, Federal aviation regulations, 12490-491, 14002
 - transport categories, Federal aviation regulations, 2234, 12492, 16551-552
 - aspect-ratio-6 conical parawing utility model, flight characteristics, wind tunnel investigation, 5229

Airplanes—Continued

bomber training operations in Chicago area, sonic-boom measurements, 1481
 cargo-type models, sting-support interference on aerodynamic characteristics, 12958
 export airworthiness approval procedures, 8044
 external-store separation characteristics, NASA data, summary, 2686
 4-propeller tilt-wing configuration, ground effects over fixed and moving ground plane, 11504
 general aviation, category 2 operations, 17742
 general operating and flight rules, Federal aviation regulations, 7951, 10995, 12495-496, 14006
 general purpose airborne simulator, 5161
 jet fuel anti-icing additive, effects on fuel tank linings, final report, 9991
 jet transport, handling qualities and airworthiness criteria during takeoff, research simulator for investigating, validation, 1476
 landing loads on vehicle with tricycle landing gear, theoretical dynamic analysis, 14472
 noise measurement evaluations of various take-off-climbout profiles of 4-engine turbojet transport, 2699
 sailing concept model, aerodynamic characteristics, full-scale investigation, 14465
 STOL, directional augmentation for 4-propellered transport, flight and simulator study, 9890
 supersonic fighter-bomber model, with external fuel tanks and other modifications, transonic aerodynamic characteristics, 1505
 supersonic transport—
 configuration, maneuver speed increases in relation to speed margins, simulator investigation, 16972
 configuration with variable-sweep wing, pitch maneuver speed margins, investigation, 17000
 environment, fatigue behavior of simulated wing structure, 16905
 inlet sensitivity study, 8496
 jet in-flight simulation to determine flight characteristics during landing approach, 12926
 model with highly swept arrow wing, low subsonic flight and force investigation, 12924
 pictorial navigation display in instrument departures, simulator study, 12944
 transport—
 cruising at Mach number 3, dynamic stability and control characteristics, errata, 14447
 model, using blowing over flaps for boundary-layer control, investigation over moving ground plane, 14477
 subsonic with aft engine nacelles and high tail, large-scale wind-tunnel tests, 5268
 twin turbojet, effects of aft-fuselage-mounted nacelles on subsonic longitudinal aerodynamic characteristics, 2730
 V/STOL—
 aerodynamic data on—
 large-scale semispan tilt-wing configuration, 15557
 large tilting wing, etc., in presence of fuselage, 1458
 transport model, with lift and lift-cruise fans, aerodynamic characteristics, 14484
 wing-body configurations, canard controls, hypersonic aerodynamic characteristics, 2707

Airplanes—Continued

wings and wing-body combinations in supersonic flow, integrated approach to analysis and design, 1493
 X-15—
 landing contact conditions, statistical analysis, 5271
 operation and cost experience as reusable space vehicle, 2711
 vertical-scale, fixed index instrument display panel evaluation, 9918
 X-15-2 research, ablative heat shield materials, arc-tunnel evaluation, 5238
 XB-70—
 encounters with high-altitude turbulence, preliminary evaluation, 18038
 landing-contact conditions, statistical analysis, 11548
 XV-11A, description and preliminary flight test, 11997
 see also Aircraft.
Airports:
 activity statistics of certificated route air carriers, 7517, 16547
 alleviating congestion at major metropolitan centers (address), 17446
 America's airport beautification awards program, 1741
 aviation demand and airport facility requirement forecasts through 1980 for large air transportation hubs, 15904
 design, aircraft data, change, 13999
 directory, airman's information manual, 93, 3021, 10977
 economy approach lighting aids, 10245
 Federal aid program, Federal aviation regulations, 4759, 14009, 16557
 Federal participation in cost of projects involving donated land, GAO review, 15300
 ground operations, propagation of sound, 11404
 influence on community economy, 14786
 location identifiers, handbook, 3524, 11970
 national airport plan, capacity criteria, 4190
 national parks, etc., authorization, increase, law, 467
 national plan, 8871
 problems of over-saturation and under-utilization (address), 17446
 public, acquisition of U.S. land, Federal aviation regulations, 14010
 utility, design criteria and dimensional standards, 14014
 see also Air traffic—Pavements—also names of places where located.
Air sickness, see Motion sickness.
Airspace utilization, see Air traffic.
Airspaces (streets, highways, etc.):
 use of air space in District of Columbia, authorize leases, hearings, 16407, 17598
Airways:
 Alaska, routes, certificated, map, 4371
 domestic, international and overseas routes for U.S. certificated cargo carriers, map, 4377
 International and overseas routes, map, 4372
 navigable airspace, objects affecting, Federal aviation regulations, 10994, 15238
 routes to U.S. authorized to foreign air carriers under permit, maps—
 Eastern Hemisphere countries, 4373
 Western Hemisphere countries, 4374
 U.S. transportation system routes certificated local, maps—
 service carriers, 4375
 trunkline carriers, 4376
Airworthiness, see Aircraft—Airplanes—Engines (aircraft)—Propellers—Rotorcraft.
 Alsenberg, S., plasma boundary interactions, 15512
 Aitkin County, Minn., rural county cares for its aging, 4082

INDEX 1967

Akademik S. Vavilov (USSR ship): expedition to Red and Mediterranean Seas, results, 15352

Akanine, B. K., dosimetry, tolerance, and shelf life extension related to disinfection of fruits and vegetables by gamma irradiation, 5794

Akre, Philip R., multifocal premature contractions, ECG finding of grave significance, 15897

Akron, Ohio, area wage survey, 17892

Alabama:

- bromide and iodide in oilfield brines in some Tertiary and Cretaceous formations, 11385
- census of agriculture, 1964, State and county statistics, 8963
- census of manufactures, 1963, area statistics, 152
- census of mineral industries, 1963, area statistics, 5821
- climatological data, 3096
- coast, hurricane survey, engineer report—departmental edition, 10948
- document edition, 10507
- county business patterns, 4306, 12042, 17425
- crayfish from caves, 17050
- electric rate book, 4772
- landings, fish and shellfish, 3024, 16616
- mineral industry, minerals yearbook chapter, 2548
- northeastern, bauxite and clay deposits, 2357
- postal map, 15649
- precipitation data, hourly, 3401
- salt domes, survey, 2541
- welfare funds cutoff, hearings, 6096

Alabama River, Millers Ferry Lock and Dam, navigation conditions, hydraulic model investigation, 10961

Alaka, M. A., experiment in use of balance equation in tropics, 9429

Alameda County, Calif.:

- land conveyance to—
- hearings, 16303
- law, 17539
- reports, 13669, 15128

Alanes, energy dependence of free radical production, 1744

Alarm systems:

- Federal item identification guides for supply cataloging, supplements, 3289
- multiple meter monitoring circuits served by single alarm, 17980

Alashan Desert, geographical study, 2434

Alaska:

- air carrier routes, map, 4372
- allow use of British Columbia ferries for Alaska-bound cargo, hearing, 13851
- Cenozoic pectinids, 11180
- census of agriculture, 1964, State and county statistics, 14838
- census of mineral industries, 1963, area statistics, 4280
- certificated air routes, map, 4371
- climatological data, 3096
- coal resources, 8157
- Cape Lisburne-Colville River region, 15306
- coast pilot, Pacific and Arctic Coasts, Coast Spencer to Beaufort Sea, supplement, 5945
- coastal warning facilities chart, 14717
- communication facilities between Alaska and U.S. mainland, economical use, Air Force Dept., GAO report, 15301
- county business patterns, 168, 12043
- Cretaceous ammonites from Matanuska Formation, 8170
- destructive forest insects, identification, 14085
- dietary survey, 14623
- earthquake, 1964—
- and aftershocks, Prince William Sound, research studies, 12117

Alaska—Continued

- earthquake, 1964—continued
- effects on—
- communities (series), 11175-176
- Eklutna hydroelectric project, Anchorage, Alaska, 6402
- glaciers, 11178
- hydrologic regimen (series), 1122-23, 11177-178
- south-central, air and water transport, communications, and utilities systems, 12609
- transportation, communications, and utilities (series), 6402, 12609
- field investigations and reconstruction effort, 8169
- geologic setting and effects, summary description, 8169
- horizontal and vertical crustal movement in Prince William Sound, 5940
- regional effects (series), 1121, 2370-71
- east-central—
- Cambrian and Ordovician rocks, stratigraphy, 6404
- lower Paleozoic paleontology and stratigraphy of east-central Alaska (series), 6404
- economic development, report, 1939
- electric rate book, 11018
- fisheries, 1965, annual summary, 9512
- glimpse at history and the future (remarks), 10904
- housing legislation, law, 465
- Indian and native health program, nurses, examination announcement, 10436
- Indians, Eskimos, and Aleuts, general information, 2389
- Iniskin-Tuxedni region, geology, 8163
- interior—
- photo identification guide for land and forest types, 15287
- trees, specific gravity of increment cores, 4835
- long-lines communication facilities, Government-owned, disposal—
- hearings, 16307
- reports, 10747, 16282
- long range economic planning, authorize funds—
- law, 14913
- reports, 12375, 13679
- migratory birds, Federal regulations governing hunting, etc., 14061
- military personnel of U.S. Army ordered to, helpful hints, 8882
- mineral and water resources, print additional copies, report, 13651
- mineral industry, minerals yearbook chapter, 5108
- Mount Fairplay area, geology, 12599
- natives, dental services—
- 1966, annual report, 2810
- 1967, annual report, 18159
- natural resources, 1139
- and Rampart project, 12636
- nautical chart catalog, 216
- northern, naval petroleum reserve no. 4 and adjacent areas, exploration (series), 8159
- northwestern—
- areal geology of Charlott site, 8162
- Project Charlott, potential effects on local water supplies, 2369
- nursing home care for veterans, eliminate certain requirements, report, 6007
- omnibus act, semiannual report on earthquake reconstruction activities, 9058, 16159
- place names, dictionary, 14174
- public lands, Taylor grazing act exchange authority to apply to Alaska, report, 875

Alaska—Continued
 purchase, 8-cent commemorative air mail postage stamp (poster), 7040
 snow surveys, 3317
 southeastern—
 DDT effects on ecology of salmon streams, 8040
 effects of slash burning on conifer regeneration, 4834
 recent Foraminifera, 12614
 transportation of merchandise in part over Canadian highways, exempt from Merchant marine act, report, 15107
 stratigraphy of Keku Islets, Kulu Island, and Kupreanof Islands, 12600
 Tertiary plants from Cook Inlet region, 2365
 trade study, 15243
 USDA programs, etc., and their application to Alaska (address), 25
 White Mountain mercury deposit, investigations, 6677
 Alaska Agricultural Experiment Station: transfer to University of Alaska—
 law, 366
 report, 660
 Alaska, Field Committee for Development Planning in, see Federal Field Committee for Development Planning in Alaska.
 Alaska, Gulf of, recent Foraminifera, 12614
 Alaska Highway, appropriation for construction, reconstruction, etc., hearings, 17673
 Albania:
 background notes, 11814
 capsule facts for Armed Forces, 15913
 press information report, 3701
 Albany, N.Y., area wage survey, 12772
 Albany Metallurgy Research Center, metallurgical progress reports, 1807, 5795
 Albedo, planetary, effect on solar orientation of spacecraft, 16985
 Alberg, Mary, differential energy and angle spectra for Cs-137 gamma rays in water and air, 13326
 Albers, John P., mineral resources of California, 2124
 Albin, Donald R., water resources of Jackson and Independence Counties, Ark., 14181
 Albo Maya, Jacobo, relief, 560
 Albumin:
 change in normal human serum parameters during simulated altitude and aerospace flights, 8868
 radioactive, vascular and lymphatic absorption from lungs, 13269
 Albuquerque, N. Mex., area wage survey, 12770
 Alcocer, Julio F. D., see Dumas y Alcocer, Julio F., and wife.
 Alcohol:
 denatured, distribution and use, code of Federal regulations, 8222
 impairment of airmanship, 4251
 industries, 1966, statistics, 6453
 monohydric and polyhydric, transesterification of phosphites and phosphinites, USSR study, 1210
 see also Alcohollism.
 Alcohol and Tobacco Tax Division, available forms relating to activities of Division, description, 16720
 Alcoholic beverages, see Liquors.
 Alcohollism:
 alcohol and alcohollism, 15675
 alcohol education, conference proceedings, 8187
 alcohol, fun or folly, illustrated pamphlet, 18104
 prevention and treatment in District of Columbia, hearings, 13702
 Alcyonaria, see Corals.
 Aldehydes, common names, flash point, etc., technical reference, 9736

Alder, Albert V., F-106B aircraft flashblindness experiment, 17349
 Alderman, Alice J., prescribed and non-prescribed medicine, type and use, etc., 18188
 Aleutian Islands, nautical chart catalog, 216
 Aleuts:
 Alaska, general information, 2389
 dental health program, 11724
 Alexander, Allen L., chemical research in atmosphere purification and control on nuclear-powered submarines, 17084
 Alexander, Clifford L., Jr., nomination, hearing, 17667
 Alexander, John A., composite materials for space vehicle application, 12861
 Alexander, Robert R.:
 site indexes for lodgepole pine, with corrections for stand density—
 instructions for field use, 2333
 methodology, 14145
 stocking of reproduction on spruce-fir clear-cuttings in Colorado, 2314
 Alexander, S. Kern, public school finance program, 17724
 Alexander, T. A., chorioretinal lesions by thermal radiation, 10231
 Alfalfa:
 genetic traits in tetraploid and diploid, illustrated summary, 8849
 pea aphids, how to control, 7274
 screening and testing for resistance to alfalfa seed chalcid, procedures, 14733
 technical alfalfa conference proceedings, 7
 Algae:
 algal growth aqueous factors, selected biological references, 6338
 combined propagation of unicellular algae and bacteria, Hungarian study, 12691
 Algebra:
 college, study guide, 9363
 Lie series, new method for numerical integration of ordinary differential equations, 9877
 real linear algebras, characterizations, 6898
 see also Matrices (mathematics).
 Algebraic methods for dynamic systems, 2600
 Alger, Donald, measurement of effective delayed neutron fraction for NASA Zero Power Reactor I, 2694
 Algeria:
 agricultural commodities, agreement, 2892
 capsule facts for Armed Forces, 13284
 labor conditions, 1364
 mineral industry, minerals yearbook chapter, 2549
 Algesimeters, modified to provide accurate depth measurements, 6809
 Algonac Manufacturing Co., claim, 13586
 Algorithms, see Arithmetic.—Mathematics.
 Allens:
 code of Federal regulations, 7976
 deportation suspension, reports, 15075-76
 permanent residence, oppose granting to certain allens, 615
 Alignment of inertial systems on moving base, 16976
 Alimentary canal, tumors of alimentary tract in Africans, symposium, 14632
 Alkali halides, perturbation times in alkali-halide systems, 9996
 Alkali metals:
 dispersions, process for preparing, 6801
 ultra pure, ultra pure transition elements in, solubility studies, 1424
 Alkyl compounds, selective inhibition of non-specific cholinesterase by some 0,0-diethyl-S-alkylthiophosphates, USSR study, 15402, 16733
 All hands, Naval Personnel Bureau career publication, 3025

INDEX 1967

All-Union:

- NOTE.—For headings beginning All-Union, see Union of Soviet Socialist Republics.
- Allbright, Charles S., hydrogenation studies of distillate fuels, 12517
- Allegan, Mich., meteorite, composition, 18089
- Allegheny River and Valley, chemical quality of surface water in basin, Pa. and N.Y., 8180
- Allen, David B., address, June 22, 1967, 13047
- Allen, Edward P., free world production and trade in selected household appliances, 7573
- Allen, George, livestock-feed relationships, 1909-65, supplement, 1720
- Allen, Harry W., Bredin-Archbold-Smithsonian biological survey of Dominica, new species of *Tiphia*, 14540
- Allen, Jerry M., turbulent-boundary layer characteristics of pointed slender bodies of revolution at supersonic speeds, 18026
- Allen, Philip T., farm real-estate credit, analysis of borrowers and lenders, 2170
- Allentown, Pa., area wage survey, 11324
- Allergy, aviators, 14782
- Alliance for progress, see Latin America.
- Allied Forces in Europe, see North Atlantic Treaty Organization.
- Allied Health Professions Education Subcommittee of National Advisory Health Council, report, 14622
- Allison, Lewis J., synoptic world weather analysis of TIROS VII radiation data, 12922
- Allotments (Army), see Pay, allowances, etc.
- Allowances, see Pay, allowances, etc.
- Alloys:
- alloy 718, application in M-1 engine components, 12862
 - analysis procedures, 9985
 - biaxially stressed D43 alloy with refluxing potassium, compatibility, 11422
 - brazing, holds bonding strength over wide temperature range, 5207
 - composition determined by thermoelectric metal comparator, 8387
 - development, designs of experiments as telescoping sequences of blocks for optimum seeking, 14490
 - dispersion alloys, selected submicron powder blending methods, comparison, 6880
 - high temperature oxides, bonding, 10016
 - identification symbols, Communist China, 6547
 - oxide dispersion strengthened alloys, 17951
 - silver-base ternary alloy proves superior for slip ring lead wires, 5212
 - thermophysical properties—
 - 8 alloys, their constituents, and oxides, technical report, announcement and procurement information, 9798
 - investigation by torsion-effusion technique, 17924
 - see also names of metals, etc.
- Allred, James E., design and development of automatic indirect blood pressure monitoring device, 73
- Allsman, Paul L.: cement, 5098
- lime, 2546
- Alulsi, Earl A., code transformation task that provides performance measures of nonverbal mediation (Cotran), 16916
- Alluviums:
- Kern River, 1116
 - sediment transport in alluvial channels (series), 11181, 16995
- Alma-Ata, Kazakh SSR, dam construction, eyewitness report, 14244

Almanacs:

- air, 2767, 11626, 15621
- National Institutes of Health, 10055
- nautical—
- 1968, American ephemeris and nautical almanac, 2768
 - supplement, 6995
 - 1968 calendar year, 11627
- Almena unit, see Missouri River Basin project.
- Almost 65? here is important information for you, 5510
- from your pharmacist, 5509, 8688
- Alonso-Garcia, Armando J., relief, 9195
- Alosa sapidissima, see Shad.
- Alouette satellite, see Satellites.
- Alpendre Seisdedos, Manuel, relief, 12341, 16212, 17513
- Alpha particles:
- backscattering measurements used for chemical analysis of surfaces, 12840
 - breakup of deuterons, mechanism, 18032
 - (d, α) reaction on—
 - aluminum 27, 6852, 14448
 - fluorine 19 and nitrogen 15, interpretation, 9873
 - scandium 45, differential cross section, 16989
 - elastic and inelastic scattering from even tellurium isotopes, 11536
 - monoenergetic X-rays from alpha emitting isotopes, generation and use, 4234
- 9-alpha-fluorohydrocortisone, see Hydrocortisone.
- Aisina, Rita M. Garmendia de, see Garmendia de Aisina, Rita M.
- Altavista, Va., motor carrier accident, 6476
- Alternating currents, see Electricity.
- Alternatives to incarceration, studies in delinquency, 10135
- Alternators, see Electric generators.
- Altitude:
- accommodation, low doses of acetazolamide to aid men, 1736
 - dysbarism, treatment with oxygen under high pressure, 7367
 - effects on body compartments of rats, 10295
 - electrons at synchronous altitudes, trapped radiation environment models, 8437
 - elevation effects on rainfall near Hollis, Alaska, 16655
 - energy, nitrogen, and water requirements of normal adults residing at 4300 meters for 28 days, 14806
 - high—
 - cardiopulmonary responses of resting man during early exposure, 7413
 - man's adaptation to lower Caucasus, USSR study, 14276
 - metabolic effects of prolonged bed rest, their modification by simulated altitude, 14777
 - oxygen requirements, 8921
 - relationship between—
 - altitude and micropopulation, 1733
 - frontal activity and micropopulation at altitude, 1732
 - respiratory function in normal young adults at 3475 and 4300 meters, 5753
 - scale heights in topside ionosphere, Alouette I observations, 2617, 6736
 - summary graphs, 16930
 - simulated, normal human serum parameters, 7341-42
- Altitude rate command system, 9997
- Altman, L. B., electric water pumps on farm, 10176
- Alumina:
- alkalized, system for SO₂ removal, process development in removing sulfur dioxide from hot flue gases, pilot plant study, 12831
 - extractability from anorthosite by lime soda sinter process, correlation of reaction products, 9784

Alumina—Continued

fused crude aluminum oxide, disposal from national and supplemental stockpiles—

law, 437

reports, 685, 922

lime-soda sinter process for producing from

clay, evaluation, 9770

Pederson process adaptation to ferruginous

bauxites of Pacific Northwest, 9788

tritiated, serves as reagent for self-labeling

analysis, 16886

see also Boehmites.

Aluminate, solutions, desilicizing, USSR

study, 9645

Aluminum:

alloys—

aqueous environments, crack propaga-

tion, delayed failure, and residual

static strength, 6872

friction of copper-aluminum alloys, pos-

sible relation with stacking-fault

energy, 8490

heat treatment study of aluminum cast-

ing alloy M45, 12892

materials data handbooks, announce-

ments, 9851, 17956

sheet, uniaxial and biaxial fracture

toughness, 11552

treatment increases stress-corrosion re-

sistance, 6760

weldable, high strength, developed for

cryogenic service, 6776

welds, effect of welding position on po-

rosity formation, 12903

aluminized thin-window proportional-

counter tube is stronger, more respon-

sive in long wavelength region, 8451

aluminum-titanium hydride-boron carbide

composite provides lightweight neutron

shield material, 16878

BDSA looks at domestic aluminum situa-

tion (address), 5806

chemistry of aluminum in natural water

(series), 15313

corrosion in water, 17938

electroless nickel plating, 5202

electrolysis, fluorine balance determina-

tion, USSR study, 9645

electrothermal method for producing alu-

minum and its alloys, history, USSR

study, 12719

forgings, industry, notice to trade, 10332

fracture toughness of wide 2014-T6

aluminum sheet at -320°F , 12936

fusion welds, continuous internal channels

produced, 12909

identification marking, Federal standard,

8008

industry, Japan, 9015

ingot and mill products, current industrial

reports, 3169, 15991

potential resources of the world, 8154

potential sources, 14325

primary, monthly report, 3768

products, preparation for shipment and

storage, military standard, 16466

projectile size effects on hypervelocity im-

pact craters in aluminum, 14468

scrap and secondary ingot, mineral indus-

try survey, monthly, 3855

sintered aluminum powder (SAP), used

for manufacture of pistons for high-

speed engines, USSR study, 4969

Ti-SAl-1Mo-IV simulated structure, fu-

sion welded, fatigue behavior, 16905

welds improved by bead removal, 8457

zircaloy-aluminum composite pressure

tubing, fabrication process, develop-

ment, 8907

see also names of articles manufactured

from aluminum.

Aluminum Company of America, wage

chronology, 16821

Aluminum foil, converted, current industrial

reports, 17429

Aluminum hydroxide, complexes in dilute

solution, form and stability, 15313

Aluminum isotopes, Al 27, investigation of

(d,a) reaction, 6852, 14448

Aluminum oxide, see Alumina.

Aluminum silicates, see Silicates.

Alvarez-Gomez, Anselmo S., relief, 9207,

12150, 12218

AM series, 136-141, 1820-23, 4248-55,

5802-4, 7446-47, 10320-322, 13351,

14812, 15979-981, 17410-414

Amado, Juliano B., relief, 10721

Amado, Manuel S. B., relief, 10721

Amat, Alberto Fernandez-Bravo y, see

Fernandez-Bravo y Amat, Alberto.

Amateur Athletic Union, controversy with

NCAA, status, hearing, 17646

Ambiguity function independent of as-

sumptions about bandwidth and carrier

frequency, 8598

Amblycera, see Lice.

Ambrose, Paul M.:

abrasive materials, 5097

fluorspar in 1966, preliminary report,

5103

sulfur and pyrites, 6692

sulfur in 1966, preliminary, 5135

Ambrosia beetles, see Beetles.

Ambulances:

2d and 3d class postal rates for volun-

teer ambulance and rescue companies,

extend, report, 694

standard models and special equipment

requirements, military standard, 15189

AMC, see Army Materiel Command.

Ament, W. S., Brownian motion as route

to statistical mechanics, etc., 8597

America:

Alouette I observations over continents,

2617

summary graphs, 16930

America's airport beautification awards

program, 17441

18th century, floor coverings, 14530

goals for urban America (address), 17022

industrial and occupational manpower re-

quirements, 1964-75, study, 6603

metropolitan, challenge to Federalism,

study, 2048

print additional copies, reports, 10590,

10785

new era for America's waters, 6342

science and America's beauty, 15841

trails, report on nationwide trails study,

5367

see Central America—Latin America—

North America—South America—United

States.

America illustrated (periodical):

Polish language edition, 3026

Russian language edition, 3027

American Academy in Rome:

real and personal property, increase

amount—

law, 16135

report, 14966

American Association of State Highway

Officials:

report on Federal-aid highway needs after

1972, 12314, 12321

print as Senate document, report, 12370

American Battle Monuments Commission:

appropriations, 1967, law, 501

appropriations, 1968—

hearings, 10632, 16390

reports, 10616, 16372

American Cancer Society, Massachusetts

Division, gas-liquid chromatograph mass

spectrometer, duty-free entry, 13775,

14901

American Ceramic Society, nuclear science

and technology for ceramists, symposium,

proceedings, 12982

INDEX 1967

- American education (periodical), 3028
- American ephemeris and nautical almanac, 2768
- supplement, 6995
- American Ethnology Bureau, bulletins, 8872, 11973
- American Expeditionary Forces:
 - battle art, exhibition, 8680
 - cartographic records, 1917-21, preliminary inventory, 14508
- American Falls Reservoir, ground water in vicinity, 17832
- American Federation of Labor-Congress of Industrial Organizations, civil defense policy resolutions, 1903, 17452
- American Flyers Airline Corporation, accident, 10404
- American Historical Association:
 - report, 1965—
 - departmental edition, 1747
 - document edition, 2010
- American history, *see* History—Naval history.
- American History Month:
 - designate—
 - law, 472
 - report, 10773
- American Indians, *see* Indians.
- American Institute of Architects, Brooklyn Chapter, awards in fallout shelter competition, 7529
- American Instructors of the Deaf, Convention of, *see* Convention of American Instructors of the Deaf.
- American Journal of Nursing, relief, 7631
- American Legion:
 - convention, 1966, proceedings, 12197
 - legislative program, hearings, 9172
 - membership eligibility, redefine—
 - law, 363
 - report, 894
- American Meteorological Society, meteorological geostrophysical abstracts, 3636
- American Motors Corporation, adjustment assistance case pertaining to certain workers, excerpts from Tariff Commission report to Automotive Agreement Adjustment Assistance Board, 10112-113
- American National Red Cross, community involvement in civil defense, suggestions, 16051
- American Nuclear Society, special sessions on radiation transport and biological effects, proceedings, 13314
- American parade of politics, 10078
- American Petroline Co., of Texas, relief, 15068, 16226, 17524
- American policy, *see* International relations.
- American republics:
 - Inter-American series, 11828
 - plan for decade of urgency, commitment for progress, declaration of Presidents of America, Punta del Estes, Uruguay, 11828
 - waterborne transportation, inter-American convention, report, 6065
- American Revolution Bicentennial Commission, act, amend rel. to membership, report, and authorization, report, 13681
- American Samoa:
 - county business patterns, 13385
 - Geniostoma, description, title page and index, 17048
 - Governor, annual report, 12637
 - nautical chart catalog, 7558
 - social security tax guide for employers, 2402
- American Society for Testing and Materials, metric practice guide, 6915
- American States, *see* American republics.
- American Veterans of World War II, legislative program, hearings, 9172
- American Viscose Corp., wage chronology, 16822
- Americans:
 - meet at home, extend friendship to visitors from throughout world, 10126
 - officials and their families, social usage abroad, guide, 8712
- Americas, *see* American republics.
- America's day begins in Guam, U.S.A., 9564
- America's department of natural resources, 2391
- Americium, apparatus for fabrication of americium-beryllium neutron sources prevents capsule contamination, 14366
- Ames Research Center, Moffett Field, Calif., closed life-support system, 15515
- AMG, *see* Acreage marketing guides.
- Amidon, Elliot L., MIAADS2, alphanumeric map information assembly and display system for large computer, 14142
- Amines:
 - controlling off-site hardwoods with 2,4-D amine concentrate, 12583
- m-aminobenzyl amine (MABA), syntheses, properties, and uses, 9959
- tissue, alterations by toxic decaborane-14 and pentaborane-9, modified by hydrazines and propylamines, studies, 7357
- Amino acids, aromatic L-amino acid decarboxylase inhibition by decarborane, 14775
- Amino compounds, concentration in rat plasma, effects of ionizing radiation, 5714
- Amino resins, *see* Resins.
- Ammonia:
 - compatibility with balloon fabrics, 4836
 - use with coal for hydrogen cyanide production, 14349
- Ammonites, Cretaceous, from Matanuska Formation, 8170
- Ammonium bisulfate, fusion with euxenite metal, extraction of values, 6685
- Ammonium nitrate, sympathetic detonation, studies, 5131
- Ammonium sulfate, fusion with euxenite metal, extraction of values, 6685
- Ammunition:
 - color coding, military standard, 16467
 - control of projectile flight characteristics, engineering design handbook, 1751
 - Federal item identification guides for supply cataloging, supplements, 3293
 - inert components, packaging, packing, and marking, military standard, 10899
 - rigging, for low and high velocity airdrop, 7399, 13303
 - shipments, indemnification for losses arising from, agreement with Great Britain, 17184
 - small arms ammunition, identification guide, 5738
 - specialized ammunition machinery, industrial plant equipment handbook, 9367
 - transporting, Navy driver's handbook, 7009
- Amortization, *see* Mortgages.
- Ampeliscidae, *see* Amphipods.
- Amphibious operations:
 - amphibious training manual, 16839
 - antimechanized operations, Fleet Marine Force manual, 16841
 - engineer amphibious units, Army field manual, 4204
 - reconnaissance, Fleet Marine Force manual, change, 12782
- Amphipods:
 - benthic Amphipoda of Monterey Bay, Calif., 2751
 - gammaridean, bathyl and abyssal, of Cedros Trench, Baja California, 17046
 - Morro Bay, Calif., benthic survey, 6956
 - Pacific Ampeliscidae, species, etc., 6961
 - pelagic amphipod Cyphocaris challengeri in northeast Pacific (Gammaridea: Lysianassidae), variation and distribution, 6967
 - subterranean, genus Stygonectes (Gammaridae), systematics, speculation, and distribution, 12996

Amplan, Sarkis G., lime soda sinter process, extractability of alumina from anorthosite, 9784

Amplifiers:
 drift tester, 8503
 electrometer, operates over dynamic range of 5 orders of magnitude, 14414
 field effect transistors improve buffer amplifier, 17961
 fluid amplifier elements, experimental scaling study, 9850
 logarithmic, SiC/Si diode trigger circuit provides automatic range switching, 17957
 microminiature dc signal conditioning system, development, 14483
 miniature electrometer preamplifier compensates for input capacitance, 2666
 nanosecond, discriminator circuit super-regulation, digital system provides, 5147
 operational, limit circuit prevents over-driving, 17925
 provides dual outputs from single source with complete isolation, 14367
 push-pull, circuit provides overcurrent protection, 16948
 transistor biased, minimizes diode discriminator threshold attenuation, 16883
 voltage regulator/amplifier is self-regulated, 11480
see also Fluid amplifiers.

Amputees, lower extremity, immediate post-surgical prosthetics, 13171

AMS, *see* Applied mathematics series.

Amsden formation, *see* Pennsylvanian period.

Amusements, entertainment expenses, rules for deducting from income tax, 2410

AMVETS, *see* American Veterans of World War II.

Anable, Wallace E., electron-beam purification of vanadium, 15480

Anahela, Calif., area wage survey, 12773

Anahuac National Wildlife Refuge, birds, list, 11085

Analog computers, *see* Electronic computers.

Analog-to-digital converters:
 analysis and calibration of analog to digital encoders, 9891
 ten-bit, general information, corrected copy, 11486
 Analog to digital encoders, *see* Analog-to-digital converters.

Analysis, *see* Radioactivation analysis—Radiochemical analysis—Thermogravimetric analysis—also names of substances analyzed.

Analysis and design of space vehicle flight control systems, 12871-876, 14383-384, 15497-503

Analysts, *see* Management analysts—Public health analysts—Transportation analysts.

Analytical approach to determination of stellar fields of view, 11557

Analytical chemistry, *see* Chemistry.

Analytical Coordination Chemistry Section, annual report, 14518

Analytical Mass Spectrometry Section, activities, summary, 17041

Analzers:
 atmospheric particle analyzer, improved, 13529
 two-dimensional, use of oscilloscope, 15539
see also Pulse analyzers—Spectrum analyzers.

Anatomy:
 bodily functions, effects of combined space flight factors, USSR study, 2439
 long-term lower body negative pressure, influence on circulatory function of man during prolonged bed rest, 1734

Anchorage, Alaska:
 earthquake of Mar. 27, 1964—
 effects on Eklutna hydroelectric project, 6402
 effect on hydrology of area, 1123

Anchorage of seats for automotive vehicles, Federal standard, 6320

Anchorage for seat belt assemblies in automotive vehicles, Federal standard, 6315

Anchovies, larvae, distribution and abundance in California current region off California and Baja California 1951-64, summary, 8036

Ancient Arabic Order of Nobles of Mystic Shrine, regulations for 1967 convention, report, 2088

Anderson, Arthur, relief, 16177

Anderson, D. R., normal values for clinical blood chemistry tests of Macaca mulatta monkey, 7368

Anderson, Duwayne M.:
 interface between ice and silicate surfaces, 11982
 phase composition of frozen montmorillonite-water mixtures from heat capacity measurements, 14792
 Umat bentonite, unusual montmorillonite from Umat, Alaska, 13291

Anderson, Hal E., mechanism of fire spread research progress report 2, 2329

Anderson, Henry W., rainfall and streamflow from small tree-covered and fern-covered and burned watersheds in Hawaii, 8115

Anderson, James K., bending tests of 2 large-diameter corrugated cylinders with eccentric ring stiffeners, 1506

Anderson, John L., Jr., VULCAN, depletion program for use with independent 1-dimensional spatial calculations, 16990

Anderson, LeRoy O., selection and use of wood products for home and farm building, 7264

Anderson, R. V., use of atmospheric-electricity recordings in fog forecasting, 8590

Anderson, Webster S.:
 lightweight recoverable hydraulic prop, 17913
 test operations of pneumatic vibrating-blade planer, etc., 1411

Anderson, William D., Jr., field guide to snappers (Lutjanidae) of western Atlantic, 8019

Anderson, Ind., population, special census, 13398

Andervont, Howard B., journal of National Cancer Institute, 3487

Andreasi, John L.:
 effects of signal patterning upon vigilance performance and physiological responses, 8585
 vigilance performance and physiological responses under fixed and variable signal schedules, 14590

Andrews, A. M., remarks, Mar. 1, 1967, 7522

Andrews, Archie M.:
 addresses, etc.—
 Feb. 20, 1967, 6465
 May 25, 1967, 11228

Andrews, Edith W., labor law and practice in India, 8300

Andrews, Richard L., electrodeposition of iridium from fused sodium cyanide and aqueous electrolytes, 16865

Andrus, J. F., integration of control equations and problem of small time constants, 8505

Anemia, equine infectious anemia (swamp fever), questions and answers, 14756

Anesthetics:
 anesthetized dogs, cardiovascular responses during repeated decompressions to near-vacuuming, 78
 apparatus for inhalation anaesthesia for small laboratory animals, USSR study, 1288
 fish, use of MS-222, 8033

Angel, C. D.:
 fluid handling, classification definitions, 18126
 geometrical instruments, classification definitions, 18120

INDEX 1967

- Angel, C. D.—Continued
motor vehicles, classification definitions, 18129
- Angel, J. Lawrence, early skeletons from Tranquillity, Calif., 1531
- Angelfish, South American freshwater, genus *Pterophyllum*, 8539
- Angle of attack:
entry flight aerodynamics from Apollo mission AS-202, 17009
Project Fire flight reentry, time history, 18020
shock layer effects over bodies of revolution, methods for predicting flow, 11507
- Anglin, Ernie L., relationship between magnitude of applied spin recovery moment and ensuing number of recovery turns, 14474
- Angola, *see* Portuguese West Africa.
- Anguilla, *see* Leeward Islands.
- Angular distribution, gamma ray coefficients, compilation, 12013
- Angular momentum, Fortran programs for calculation of, Wigner 3j, 6j, and 9j coefficients, 1526
- Anhydrides, phthalic and maleic, from low-temperature lignite tar, 9768
- Anido-Fragulo, Hilario, relief, 9246, 12148, 12217
- Animal industry, *see* Livestock.
- Animal products:
code of Federal regulations, 9461
long term forecasts of supply and demand in Venezuela, summary and evaluation, 12456
trade and tariff information, summaries, 7203
- Animals:
byproducts, salmonella control, sanitation guidelines for processors, 11922
cells, infecting with ribonucleic acid of tobacco mosaic virus, possibility problem, USSR study, 6486
code of Federal regulations, 9461
damage control policy for Sport Fisheries and Wildlife Bureau, 11078
damage to seedlings, C-14 labeled tetramine, absorption and distribution, in relation to use in control, 4851
drug amendments of 1967, hearing, 17605
electronarcosis and electrosleep, USSR book excerpts, 15396
experimental formation of interferon in animal organism, characteristics, USSR study, 4989
experimental, in convulsive states, USSR electron microscope study of cerebral cortex, 12752
husbandry, achievements of Belorussian Scientific Research Institute of Animal Husbandry in 50 years of Soviet power, 15421
in atomic research, uses, etc., 15977
irradiation of natural animal populations, design of shielded source, 1782
laboratory—
apparatus for inhalation anaesthesia, USSR study, 1288
exposure to space cabin environment, viral antibody production, 74
live, Federal item identification guides for supply cataloging, supplements, 3292
popular description of chromosome and animal transplant experiment, USSR, 1307
psychopharmacology research, handbooks, index, 7083
surplus disposal on national wildlife refuges, 16622
vestibular apparatus, USSR studies, 17864
wild animals as source of food, 4810
see also Diseases of animals—Livestock.
Anisopodidae, *see* Flies.
- Anisotropy:
Knoop hardness, stereographic representation, 18051
neutron production by fusion in class of anisotropic plasmas, 5347
rock stress determinations, 12818
ultrasonic pulse measurements in anisotropic lake ice, 1754
Annealing, TI-8A1-1Mo-IV (duplex-annealed) specimens having various widths, fatigue crack growth, investigation, 8494
Annelids, crayfishes and their epizootic ostracod and branchiobellid associates of Mountain Lake, Va., region, 15604
Annett, John, use of cuing in training tasks, 15635
Annie B. (vessel):
documentation with coastwise privileges, report, 10763
Anniston, Ala., bauxite deposits, 2356
Annual leave, *see* Leave of absence.
Annuals (plants):
flowering, growing, etc., 15853
Annuitants:
Foreign Service retirement and disability system, increases and adjustments, report, 13795
Panama Canal noncitizen retirees, increase benefits—
law, 426
report, 934
railroad retirement act—
adjustments, law, 414
supplemental, law, 413
see also Civil service pensions—Pensions.
Annunciators, solid state, facilitates complex system troubleshooting, 2640
Annunziata, Joseph W., French reactions to American involvement in Vietnam, 6703
Anodes:
high rate, exploratory investigation, 8596
microstructure, 8591
Anolls, *see* Lizards.
Anorthosite, alumina extractability by lime soda sinter process, correlation of reaction products, 9784
Anrrich, Rafael, relief, 555
Ansley Wilcox House, acquire and preserve as historic site, law, 422
Antarctic regions:
Antarctic journal of United States, 3031
Antarctic krill, Soviet fishery research, 15345
bibliography, 6621
climatological data for Antarctic stations, 6217
cores, particulate content, 17374
gazetteer, official standard names, 2855
ice sheets, effect of basal water layer on dimensions, 4196
inventory of archived data, 6996
multilateral treaty, measures in furtherance of principles and objectives, recommendations, 2899
seismological bulletin (periodical), 3032
Soviet Committee for Antarctic Research, reports on recent work, 12728
Soviet research, 10 years, 12755
Antarctic Treaty, measures in furtherance of principles and objectives, recommendations, 2899
Antarctica, *see* Antarctic regions.
Antenna horns:
errors in gain measurements in standard electromagnetic horns, 9944
shortened horn-reflector antenna, 8452
Antennas:
advanced techniques for rendezvous radar, study, 11403
Cassegrainian, scanning means for, 12900
conjugate-pair feed systems, 5360
experimental Cassegrain-fed monopulse antenna system, 11396
Gemini VHF-UHF polarization experiment D-14, 10009

- Hartbe airborne dual antenna system for IFF, Mark X (SIF) system, 8587
input admittance of coaxial transmission line opening onto flat, dielectric-covered ground plane, 16993
linear array, turbulent troposphere effect on parameters, USSR study, 5018
long-wave and ultra-long-wave, design and methods of calculating parameters, USSR study, 15385
MF/HF communications, engineering-installation standards manual, 4667
near earth and buried, USSR study, 11262
probes on Apollo spacecraft, effects on aerodynamic characteristics, 12948
radiometric boreighting by sequential lobing, 18055
short-wave logarithmic, USSR study, 11247
signal processor employing synthetic phase isolator, 11397
simulator, permits preinstallation system checkout, 2648
structures, construction, lighting and marking, FCC rules and regulations, 3271
tower antenna structures, USSR study, 1304
waveguide fed aperture antenna radiating into inhomogeneous lossy dielectric slab, input admittance, 18028
Anthology of poetry and verse, 4911
Anthracite, *see* Coal.
Anthrax, laboratory diagnosis, accelerated methods, USSR study, 2448
Anthropology:
classification, Library of Congress, 5086
Smithsonian contributions, 1531, 6972-74, 9954, 13001, 14547
Antiballistic missiles, *see* Missiles.
Antibiotics, research and production efficiency, Rumanian study, 15404
Antibodies, *see* Antigens and antibodies.
Anticholinesterase:
activity of organophosphorus inhibitors, determination, USSR study, 1168
properties of O-H-alkyl-S-butyl methyl thiophosphonates, USSR study, 8276
Antidotes, *see* Poisons.
Antietam National Battlefield Site, general information, 9956
Antifriction bearings, *see* Bearings (machinery).
Antigens and antibodies:
antigen structure of helminths, use of immunoelectrophoresis for study, USSR, 12664
fluorescent antibodies for rickettsia detection, USSR study, 12666
indirect hemagglutination test for Mycoplasma pneumoniae employing commercially available antigen and adapted to microtiter technique, 5754
reactions to bacterial antigens after irradiation, USSR study, 9685
tissue, changes during process of experimental carcinogenesis, 1156
viral antibody production in animals exposed to space cabin environment, 74
Antigorite, solution studies, 8160
Antigua, *see* Leeward Islands.
Antihemophilic globulin, *see* Globulin.
Antiles, light list, 12123
Antimechanized operations, 16841
Antimissile defense, USSR, 9676
Antimissile missiles, *see* Missiles.
Antimony, mineral industry survey, quarterly, 3033
Antiriot bill, *see* Riots.
Antitrust Division, review of activities, 8280
Antitrust laws, *see* Monopolies—Trusts (industrial).
Antofagasta Province, Chile, geology and ground-water resources, northern part of Salar de Atacama Basin, 11164
Antoine, Albert C., thermodynamic properties of liquid metal solutions in sodium-mercury system, 9910
Ants:
Texas leaf-cutting ants—
control with mirex, 2325
description, control, etc., 15278
Antweiler, J. C., gold-bearing sedimentary rocks in northwest Wyoming, preliminary report, 9569
Anxiety, antianxiety and antidepressant drugs, uses in psychiatry, etc., 2962
Anzelewski, Fedja, catalogue and notes on Dürer and his time, 10079
Aorta:
aortic baroreceptors, 11278
aortic insufficiency in flying personnel, 17348
Aoyagi, Kiyoshi, subsonic transport with aft engine nacelles and high tail, 5268
Apache Indians:
Apache Tribe of Mescalero Reservation, judgment funds, consolidation and use, report, 15117
San Carlos Reservation, longer term leases, authorize, report, 12261
Apache National Forest, regeneration of mixed conifer clearcuttings, 11126
Apache Tribe of Mescalero Reservation, *see* Apache Indians.
Apanasewicz, Nellie, final examination in Russian ten-year school, 1002
Apartment houses, dwelling units, field burnout tests, 18075
Aperture reduction coefficient of parallel-plate waveguide by wedge diffraction analysis, 14382
Aphids:
balsam woolly aphid—
infestation in Pacific Northwest, characteristics, 4852
translocation of dye infested in grand and subalpine firs, 11116
Apirites, *see* Bees.
Apollo project, *see* Project Apollo (man-in-space program).
Apollo spacecraft, *see* Spacecraft.
Apostle Islands National Lakeshore:
establish—
hearings, 13868
report, 15109
Appalachian region:
development act of 1965—
project activity supplement, 6159
revise and extend—
hearings, 7825, 13713
law, 17548
message from the President, 4491
reports, 7788, 12359, 14957, 14974, 16265
status and progress under act, report, 7682
forest industries in Appalachia counties of Tennessee, 16666
hardwoods—
epicormic branching on 8 species, 8078
for pallets, laboratory evaluation, 16661
Kentucky and Ohio hardwood lumber production, costs and returns, 4850
mine fire control project, 6691
oilfields, densities and porosities of core samples from wells, 11353
planning and zoning suggestions, 7884
southern, regeneration in oak stands, 12578
sulfide deposits, massive, 15310
two supply cooperatives serving low-income farmers, analysis in Appalachia, 2231
underemployment concept, way to measure need for economic development, 10922
VISTA service Appalachia, 6168
woods, suitability for sanitary tissue and toweling, 8100

INDEX 1967

Appalachian Regional Commission :
 annual report, 7372
 appropriations, 1968, hearings, 9145
 Federal cochairman, nomination of Joe W. Fleming II, hearing, 6125
 Apparatus tests, performance tests for operator-skills research, 1821
 Apparel, *see* Clothing.
 Appeals :
 appellate review of sentences, provide, report, 12394
 contract appeals, decisions, 3427
 Indian appeals, decisions, 3428
 land appeals, decisions, 3429
 local union election, analysis, 6592
 military claims determinations, clarify procedure, amend U.S. Code, report, 12279
 permit appeal by U.S. from orders for return of seized property and to suppress evidence, report, 14990
 selective service classifications appeals, 15728, 17193
 Appellate proceedings, *see* Appeals.
 Apple cider, *see* Cider.
 Apples :
 bitter rot, general information, 17320
 commercial, production by varieties, 1966
 with comparisons, 2937
 grading and sizing with brushes, 7246
 McIntosh, new overwrapped trays, 1674
 orchards, young, establishing and managing, 5625
 packing costs in Michigan, analysis, 5653
 production, use, value, 1965-66, by States, 14696
 Applicants for precision placement of chemicals in soil, 1673
 Applied mathematics, computers, and information models, USSR, 16735
 Applied mathematics series, 14513
 Applied Technology Institute, *see* Institute for Applied Technology.
 Applin, Paul L., Gulf series in subsurface in northern Florida and southern Georgia, 16692
 Appointments, *see* names of persons appointed to office—*also* names of departments, etc.
 Appomattox Court House National Historical Park, general information, 2753
 Appomattox Manor, acquisition by Petersburg National Battlefield, etc., report, 14962
 Apprentices :
 apprenticeship program, setting up, 94
 cash register repairmen, apprenticeship policy, 7373
 examination, sample questions, 12112
 mechanical trades, examination announcement, amdt., 203
 Negroes in apprenticeship, 16793
 Apprenticeship and Training Bureau, publications, list, 13277
 Apprenticeships, *see* Apprentices.
 Approach, naval aviation safety review, 3036
 Approach lights, *see* Lights and lighting.
 Appropriations :
 additional, 1967 and 1968, proposal, 10694
 amendments, 1968, 10512, 12320
 general Government matters, 1967, continue—
 law, 362
 report, 641
 general Government matters, 1968, continue—
 hearings, 17635
 laws, 13525, 16131, 17547
 reports, 12276, 13808, 14988, 16267, 16282, 16285
 legislative, 1959, amend act—
 law, 17540
 reports, 14968, 15138

Appropriations—Continued
 legislative, 1967, supplemental, hearings, 2040
 legislative, 1968—
 amendments, 13723
 hearings, 10633, 12398
 law, 13537
 reports, 10617, 13672, 13813
 supplemental, new obligational authority, 1966 and 1967, proposal, 7609
 supplemental, 1967—
 hearings, 9146, 9303
 laws, 411, 10490
 proposal, 9068
 reports, 10566, 10770, 13629
see also subjects, or names of departments, etc., for which appropriations are made.
 Appropriations Committee, House :
 hearings, 2040, 6026-27, 7733-36, 9141-46, 10629-634, 12286-287, 15014-17, 16304-305
 reports, 641, 7704, 9097, 9120, 10560, 10566, 10600, 10612, 10616-617, 10620, 12276, 13633, 13666, 13678, 14978, 14988, 16267, 16282
 Appropriations Committee, Senate :
 committee prints, 10804-805
 hearings, 939, 7794, 7797, 7799, 9301-3, 10803, 10806, 12397-398, 13839-842, 15147, 16388-390, 16392-393, 16395, 17635-637
 100th anniversary, compilation, 9183
 reports, 9268, 10768, 10770, 10791, 13808, 13813, 13815, 15082, 15096, 15131, 16372-373
 Approximations, multivariable function, orthonormalization procedure, 6749
 Apricots :
 dried, U.S. standards for grades, 13894
 production, use, value, 1965-66, by States, 14695
 AFRO, *See* Army Personnel Research Office.
 Aptitude tests :
 Air Force Academy cadets, class of 1967, 1st year achievement, 17343
 Air Force officer qualifying test scores, relationship to success in undergraduate pilot and navigator training, 13267
 differential tests, comparison with airman qualifying examination, errata, 4171
 Aqualung :
 scuba diving—
 and underwater sports, USSR study, 6490
 biologic and physical aspects, 11953
 USSR, 15420
 scuba masks, effect on underwater visual resolution, 14317
 Aquatic sciences, *see* Science.
 Aquatic sports, notes on aquatics, USSR study, 16760
 Aqueous solutions, ion exchange determines iodine-131 concentration in aqueous samples, 12833
 Aquifers :
 basalt, artificial recharge through well tapping at The Dalles, Oreg., 16700
 mechanics of aquifer systems (series), 12607
 properties and well design for artificial-recharge site, 1128
 Punjab region of West Pakistan, tests, analysis, 11187
 Arab countries :
 Arab performance put to test, Lebanese article, 15430
 Communist party representatives, conference resolutions, 12718
 oil-producing, USSR report, 11254
 United States policy in Near East crisis, 14680

Arabian Gulf States, *see* Bahrain—Qatar—
Trucial States.
Arabian Peninsula, geology, 1124, 6405-7,
8173
Arabs, nationalism, Soviet view, 9629
Aradidae in National Museum (Hemiptera):
Heteroptera, notes, 5307
Aransas National Wildlife Refuge:
birds, list, 4804
mammals, list, 11087
whooping cranes, general information,
8043
Arapaho Indians:
convey certain federally owned lands to,
report, 13835
judgment funds, disposition, reports,
15007, 15115
Arberg, Harold W., sonata for 2 clarinets,
student composers take over, 7011
Arbitration, *see* Industrial arbitration.
Arbolea, Carlos J., relief, 9198
Arc (electric), *see* Electric arc.
Arc heating, megawatt dc, of nitrogen, ex-
perimental investigation, 5205
Arc tunnels, *see* Wind tunnels.
Arc welders, *see* Welders.
Arc welding, *see* Welding.
Arceuthobium, *see* Mistletoe.
Archeology:
ethnoarcheology of Crow Village, Alaska—
departmental edition, 8872
document edition, 9048
inter-agency archeological salvage pro-
gram, papers—
departmental edition, 11973
document edition, 12193
Pony Creek, 15734
publications in salvage archeology, 5499,
10081, 15734
Archer, Wayne B., group job descriptions
computation from occupational survey
data, 11951
Arches National Monument, general informa-
tion, 8551
Archiannelida, marine, from Dominica, 11612
Architect of Capitol:
appropriations, 1968, legislative—
hearings, 10633, 12395
law, 13537
reports, 10617, 13672, 13813
employees, training opportunities, report,
16232
management of and control over expend-
able supplies and materials, GAO review,
14161, 15057
Rayburn House Office Building, construc-
tion and related costs, GAO examina-
tion, 8131, 9182
reports, semiannual, 6059, 15061
Architects:
architect-engineer fees, statutory and reg-
ulatory Government-wide administration
requirements, GAO review, 16688
construction services, contracting for AEC
work, guide, 13359
demonstration city program and architect
(address), 2735
examination announcement, amendment,
17453
nuclear defense design, courses, announce-
ment, 16053
Architecture:
architecture-engineer fees, Government-
wide administration of certain statutory
and regulatory requirements, GAO re-
view, 9548
college design awards, new shapes for Ivory
towers, 7904
concrete structural design for buildings,
Army technical manual, 7391
courier station design, technical manual,
13301
definitive designs for naval shore facil-
ities, 15619-620
designing fallout shelter in new buildings,
manual for architects, 7530

Architecture—Continued
excellence in design, new potential on
American campus, 1966 awards program,
7894
Georgetown commercial architecture, Wis-
consin Ave., northwest Washington,
D.C., historic American buildings sur-
vey, selections, 11616
honor awards for design excellence, De-
partment of Housing and Urban Devel-
opment Department, 16710
Navy design manual, changes, 2764
PACAF basic bibliography, 13266
science facilities, planning, design, and
construction, literature, list, 14561
shelter through architectural design,
shielding requirements influence on form,
8951
Archives, National Oceanographic Data Cen-
ter, data inventory, Arctic and Antarctic
supplement, 6996
Arctic Coast, coast pilot, Alaska, Cape Spencer
to Beaufort Sea, supplement, 5945
Arctic Ocean, lights and fog signals, list,
5335, 8572
Arctic regions:
emergency construction, surface drainage
design for airfields and heliports, 7395
environmental health series, 14023
high polar ice sheets, measurement of
natural particulate fallout, Antarctic
and Greenland cores, 17374
Inventory of archived data, 6996
polar cap ionosphere, cooperative study,
agreement with Canada, 17248
polar region studies in geomagnetism and
aeronomy, USSR, 8277
radioactive fallout, 14794
temperature inversions survey, 4200
Ardmore, Okla., aircraft accident, 10404
Are we running out of water?, 6396
Area handbooks:
Dominican Republic, 11990
Ecuador, 10268
Kenya, 15941
Saudi Arabia, 5733
South Vietnam, 13297
Thailand, 5734
Area measurement reports, 149-150, 1831,
4265-69, 5809-15, 7456-58, 8928-29,
10335-338, 12034-36, 13357-360, 14816,
17421-423
Area redevelopment, *see* Redevelopment (city
planning, etc.)—Rural redevelopment—
Unemployed.
Area trends in employment and unemploy-
ment (periodical), 3039
Area wage surveys, *see* Wages.
Arenac County, Mich., soil survey report,
14654
Ares y Fernandez de Bosch, Myrlam, *see*
Bosch, Myrlam.
Aresco, S. J., analyses of tippie and delivered
samples of coal, 8375
Argentina, Newfoundland, *see* Naval Operat-
ing Base, Newfoundland.
Argentiero, Peter D., nonparametric tests
for randomness in sequences, 5248
Argentina:
amateur alien radio operators, authoriza-
tion to operate, agreement, 13151
atomic energy, cooperation for civil uses,
application of safeguards, agreement,
2893
background notes, 13130
capsule facts for Armed Forces, 15916
declaration on provisional accession to
GATT, 11862
economy, basic data, 4433
livestock and meat industry, 11099
mineral industry, minerals yearbook chap-
ter, 15466
radio communications between amateur
stations on behalf of 3d parties, agree-
ment, 13152
trade agreement, 2918

INDEX 1967

Argere, Athanasia, relief, 9234, 12232, 13507
 Argon:
 gas, low density, electron flow including space-charge and elastic collisions, 14480
 isotopic abundance in natural gases, rel. to helium genesis, 9785
 volume ion production costs interuous plasmas, detailed results, 15377
 Arguello, Point, budget of littoral sands in vicinity, 7924
 Argyris, Chris, some causes of organizational ineffectiveness within Department of State, 5525
 Arias, Maria del C.T. de, relief, 16222, 17523
 Ariel, *see* Satellites.
 Arithmetic:
 extended precision, subroutine allows easy computation, 2639
 one class of self-teaching recognition algorithm, USSR study, 12675
 ranger arithmetic for—
 1st and 2d grade teachers, 2293
 3d grade teachers, 2294
 4th grade teachers, 2295
 5th grade teachers, 4825
 6th grade teachers, 11108
 7th grade teachers, 2296
 Arizona:
 California boundary compact, consent of Congress, report, 4499
 census of agriculture, 1964, State and county statistics, 13409
 census of mineral industries, 1963, area statistics, 5822
 chaparral communities, moisture-retention capacity of litter, 14112
 climate, 4746
 climatological data, 3096
 county business patterns, 10346
 electric rate book, 1050
 forest resources, 2336
 highway safety study, Operation 66, joint engineering-enforcement project report, 1594
 home fruit garden, 5635
 land conveyance, hearings, 16303
 mineral industry, minerals yearbook chapter, 6643
 mineral resources of—
 Mount Baldy primitive area, 8156
 Pine Mountain primitive area, 11166
 postal map, 15650
 precipitation data, hourly, 3401
 radioactivity, airborne, 1953-56, maps, 1501
 southern, younger Precambrian geology, 16696
 vegetative key to some common range grasses, 11141
 water supply outlook and snow surveys, 4044
 Arkansas:
 area measurement reports, 149, 4265
 census of agriculture, 1964, State and county statistics, 13408
 census of mineral industries, 1963, area statistics, 4251
 climatological data, 3096
 county business patterns, 169, 12044
 electric rate books, 1051, 16582
 employment, education, and voting, State advisory committee report to Civil Rights Commission, 13434
 mineral industry, minerals yearbook chapter, 6644
 Ozarks, Appalachian loblolly grows well, 2329
 postal map, 15651
 precipitation data, hourly, 3401
 processing of high-iron bauxite ores, 9766
 radioactivity, airborne, 1952-55, maps, 1802
 Titan II missile site disaster actuarial analysis of survivor benefits payable, 7115

Arkansas River and Valley:
 basin, water quality control, engineer report—
 departmental editions, 2196-2200
 document editions, 2070-74
 lock and dam no. 4, navigation conditions, hydraulic model investigation, 2221
 navigation entrance, hydraulic model investigation, 17737
 project, low-lift locks, filling and emptying systems, hydraulic model investigation, 4743
 water supply outlook and snow surveys, 4045
 Armaments, *see* Munitions.
 Armatures, solenoid, holds residual magnetism in desired position, 8464
 Armed Forces:
 active-duty service, naturalization of those serving, hearings, 7750
 administration of military justice, hearings, 958
 America's servicemen and veterans, legislative proposals, message from the President, 5993
 appropriations, 1967—
 military procurement, report, 2014
 supplemental, military procurement and construction, etc.—
 hearings, 7799
 law, 9035
 reports, 6087, 7665, 7667, 7673
 appropriations, 1968, military procurement—
 hearings, 7797, 9149
 law, 12164
 reports, 7786, 10570, 10575, 10611
 Armed Forces Day, 1967, report, 9364
 automation of troop control, methodological problems, USSR study, 8273
 AWOL and consequences, 5736
 capsule facts for Armed Forces (series), 8873-74, 10247-250, 11974-980, 13279-285, 15905-923 17367-370.
 code of conduct, Army pamphlet, 1764
 commissioned officers in combat zones, increase combat pay exclusion, law, 452
 courts martial manual, 1951, addendum, changes, 973, 9361
 defense procurement circular, 3194
 defense supply procurement regulation, revision, 3196
 dependency and indemnity compensation for survivors, amend U.S. Code—
 law, 367
 report, 901
 dependents—
 Defense Department education overseas, report, 16322
 educational scholarships, loans and financial aids, general information, 1
 Exemplary Rehabilitation Certificates, award to individuals discharged under conditions other than honorable, etc., authorize, amend U.S. Code—
 law, 404
 reports, 626, 908
 facilities and areas and status of U.S. Forces in Korea, agreement, 8726
 Federal voting assistance act of 1955, amend, report, 13817
 fighting man's code, 13286
 former members, disability severance pay, recoupment requirements, modify, report, 14940
 health benefits program for—
 active members and dependents, report, 14941
 retired members and dependents—
 law, 365
 report, 664
 interest lost on deposit accounts of enlisted members, adjust—
 law, 451
 reports, 686, 932

JANUARY-DECEMBER

Armed Forces—Continued

Italian, World War II records, guide, 1702S
 legislation affecting, 89th Cong., 2d sess.,
 hearings, title page, contents, and index, 2041
 life insurance—
 government program, annual report, 8779
 servicemen's group, annual report, 8778
 mailing privileges—
 additional—
 hearings, 10670
 report, 10613
 provide better overseas service, law, 438
 medical and dental officers, provide promotion opportunities, report, 14943
 members—
 dependents, dental care needs, hearings, 16306
 house trailers and mobile dwellings, provide transportation costs, amend U.S. Code, reports, 629, 657
 retirement in highest grade satisfactorily held, amend U.S. Code, report, 14939
 voluntarily extending tour of duty in hostile fire area, authorize special 30-day period of leave—
 hearing, 716
 law, 448
 military symbols, field manual, 10261
 obstructing, in time of undeclared war, make punishable, reports, 2017, 2019, 10618, 12263
 personnel, accommodations on commercial air carriers while on authorized leave, subcommittee report, 4525
 postal services, Vietnam and Thailand, on-site inspection, report, 4505
 procurement regulations, 3040
 supplements, 6139, 7546, 16456
 qualification test provides clue to how good our soldiers are, 1005
 reemployment rights of Federal employees who perform duty, 5936
 retired serviceman's family protection plan, 7375
 retirees, law on employment as civilians with Air Force, 5697
 savings deposit program, allotments for missing persons, etc., reports, 16266, 17626
 servicemen, 5-cent commemorative postage stamp, 1st day ceremony (address), 1556
 supplies and services provided by DSA, 7858
 teaching, Protestant religious education program, 17706
 theory of decisions and control of troops, USSR study, 15366
 U.S. troop deployment in Europe, to express sense of Senate, hearings, 13863
 unified action, principles, doctrines, etc., covering, 16730
 uniformed services—
 health benefits program, 13287
 joint travel regulations, 3455
 VA-Armed Forces Pulmonary Diseases Research Conference, transactions, 13172
 women officers, remove promotion restrictions, etc., amend U.S. Code—
 hearing, 9148
 report, 10565
 see also Pay, allowances, etc.—Reserve components of Armed Forces.
 Armed Forces Day, 1967, Armed Forces report, 9364
 Armed Forces Industrial College, see Industrial College of Armed Forces.
 Armed Forces Information and Education :
 DOD pamphlets, 7374-75, 8873-74, 10247-250, 11974-980, 13279-287, 15905-923, 17367-370
 voting information bulletin, 4040

Armed Forces Institute :

bulletins, 6156, 16475, 17707
 manual, 7845
 study guides, 974, 9362-63, 12438, 15180, 17687
 supply announcement, 16476
 Armed Forces Institute of Pathology, leaflets of Medical Museum, 2153, 12442
 Armed Forces Voters Day, designate, report, 13817
 Armed services, see Armed Forces.
 Armed Services Committee, House :
 activities, report, 724
 calendar, 3471
 Civilian Advisory Panel on Military Manpower Procurement, report, 6028
 committee prints, 6028, 6032, 7739, 12288, 13699, 16313
 hearings, 713, 715-723, 2042-44, 4524, 4526, 6029-31, 7737-38, 9147-49, 10636-639, 12289, 13695-698, 16306-312, 17590, 17592-593
 title page, contents, and index, 2041
 Investigations and studies, procurement, etc., by Defense Dept.—
 authorization, report, 6009
 expenses, reports, 7677, 14979
 laws, 89th Congress, 1st and 2d sessions, 4523
 organization meeting, 90th Congress, 6029
 reports, 626, 629, 682-687, 689, 692, 2016, 2025, 6012, 7665, 9117, 10555, 10564-565, 10569-670, 10608, 13684, 14936-944, 16229, 16262, 16266, 16268-271, 16281
 reports, index, 4522
 statement of Secretary Robert S. McNamara on 1968-72 defense program and 1968 defense budget, 4527
 subcommittee reports, 714, 4525, 10635, 13698, 17591
 Armed Services Committee, Senate :
 calendar, 3490
 committee prints, 2105-7, 4629-30, 10809-815
 hearings, 940, 942, 944, 954, 958, 2108, 7796-97, 7799, 9304-6, 10807-808, 10816, 13843, 13863, 15148-149, 16394-395, 17637, 17639-640
 Investigations and studies, authorization, report, 4606
 reports, 907-908, 919-922, 926, 932-936, 2082, 2101, 4586, 6057, 7736, 9277, 10744, 10747, 16371, 17825-626
 Armed services papers, 714-724, 2042-44, 4524-26, 6029-31, 7737-38, 9147-49, 10635-639, 13695-698, 16306-312, 17590-593
 title page, contents, and index, 2041
 Armenian Soviet Socialist Republics, Academy of Sciences, annual meeting evaluates recent work, 9636
 Armistice line, Israel-Lebanon, 11829
 Armor :
 material, personal, ballistic test facility, military standard, 9375
 operations, Army technical manual, 101
 Armour and Co., wage chronology, 1359
 Armrests, automotive vehicles, Federal standard, 6328
 ARMS, see Aerial radiological measuring survey.
 Arms (firearms), see Firearms—Munitions.
 Arms control, see Disarmament.
 Arms Control and Disarmament Agency :
 annual report, 1966—
 departmental edition, 13288
 document edition, 13549
 appropriations, 1867, law, 501
 appropriations, 1965—
 hearings, 10632, 16390
 reports, 10616, 16372
 design study, 15924
 research and studies, report, 4191
 telephone directory, 15764

INDEX 1967

Armstrong, George T., calculation of heating value of sample of high purity methane for use as reference material, 2743

Army:

- acquisition and installation of computers by Army, Pacific, GAO review, 9552
- aircraft—
 - fixed wing cargo, restraint design criteria, analysis, 10259
 - maintenance quality control and technical inspection guide, technical manual, 8893
- airfield-helipport design, general provisions and criteria, technical manual, change, 10274
- armies and social progress, USSR study, 1327
- Army technical library improvement studies, report 2, 10265
- audio-visual support center operations, field manual, 4206
- aviation—
 - air transport operations, 11986
 - digest, 3996
 - divisional battalion and group, field manual, 10259
 - maintenance engineering manuals, 4218, 7400, 8892, 10282
 - meteorology applicable, technical manual, change, 7390
 - utilization, field manuals, 4203, 15935
- CH-34 helicopter, DS, GS, and depot maintenance manual, 7401
- Chief of Staff, appointment, etc.—
 - law, 12164
 - report, 10611
- civilian aides to Secretary of Army, 13th national conference, summary, 15944
- crafts program, 4th dimension is you, career opportunity, 7382
- desserts recipes, technical manual, 8886
- digest, 3042
- drill and ceremonies, field manual, 5728
- enlisted members, computing retired pay, report, 16270
- enlisted personnel, promotion system, Army pamphlet, 10266
- facilities, basic criteria and construction standards, technical manual, 4213, 10270
- field press censorship, manual, 13293
- field radio relay techniques, manual, 5729
- food adviser, technical manual, 14802
- food, preparation and serving in garrison mess, technical manual, 7397
- installations and major activities in continental U.S., list, 14795
- Judge Advocate legal service, pamphlets, 3461
- logistics 1775-1953, sinews of war, 1307
- manpower—
 - monograms for policy evaluation, 4227
 - rotation policy models, 7404
- materials, transfers of excess to Marine Corps, expedited procedure, GAO review, 14163
- mathematicians, 12th conference transactions, 8876
- military personnel—
 - dependents traveling to oversea areas, information, pamphlet, 1765
 - ordered to—
 - Alaska, helpful hints, 8882
 - Canal Zone, Southern Command, helpful hints, 14797
 - Germany, helpful hints, 13299
 - Japan, helpful hints, 7387
 - Korea, helpful hints, pamphlet, 14798
 - Puerto Rico, Southern Command, helpful hints, 17384
 - Ryukyu Islands, helpful hints, 7388
 - Southern European Task Force (Italy), helpful hints, 11991
 - policies, digest, pamphlet, 17382
 - personnel, unit officer's guide, Army pamphlets, 10269, 15942

Army—Continued

- procurement and production, manufacturing methods and technology, 5-year program, 15943
- procurement legal service, pamphlets, 5737, 7389, 8883-84, 13300, 14799-800
- procurement of light observation helicopters—
 - review, hearings, 12289
 - subcommittee report, 13699
- procurement procedure, changes, 1753, 8875, 10254
- publications, price list, 15669
- recruiting and career counseling journal, 3812
- register, Jan. 1, 1967—
 - departmental editions, 8896A, 10284-285
 - document editions, 9052, 10502-503
- research and development—
 - magazine, 3043
 - series, 4219A
- resources, emergency employment, natural disaster activities, 17735
- rifle procurement and distribution program—
 - hearing, 10807
 - report, 10810
- scientific & technical information program, 13306
- signal construction battalion, field manual, 4205
- signal large headquarters, operation company, field manual, 15937
- sites, engineering weather data for heating and air conditioning design, etc., 11947
- squad leaders guide, pamphlet, 11988
- this is the Army, general information, career opportunities, etc., 11989
- troop movement guide
 - Army technical manual, 17387
- troop topics, 4212, 14796, 15939, 17381
- United States Army in—
 - Europe, availability of selected stocks for requirements of other commands, Army Dept., GAO review, 8140
 - South Vietnam, status report, 10814
 - World War II, 5096
- Army Audit Agency, bulletin, 3982
- Army Aviation Materiel Laboratories, technical reports, 116-117, 1773, 4220-23, 5747-49, 7408-11, 8897-98, 10286-293, 1196-998, 13307-310, 15955, 17388
- Army Department:
 - acquisition and installation of computers by Army, Pacific, GAO review, 9552
 - annual report, 2149
 - appropriations, 1967, public works law, 403
 - appropriations, 1968—
 - military construction, hearings, 16305
 - public works—
 - hearings, 10634, 16393
 - report, 13678
 - Army regulations, 4194, 14790, 17373
 - Army Tank-Automotive Command, Warren, Mich., actions to improve financial management system, GAO report, 17810
 - Assistant Secretary, nomination of Eugene M. Becker, hearing, 15148
 - availability of selected stocks of United States Army in Europe, for requirements of other commands, GAO review, 8140
 - chief and executives, organization chart, 3393
 - civilian career opportunities for college graduates, 8877
 - civilian personnel pamphlets, 5723-24
 - Enlisted Evaluation System, 17381
 - field manuals, 100-102, 1757-62, 4203-9, 5726-30, 8851, 10259-263, 11985-986, 13293, 15935-938
 - management of aircraft repair parts reserved at depots in U.S., GAO review, 9555

Army Dep
pamphle
5732-
11987
15935
publicat
technic
4213-
10270
14801
transpo
cargo
water r
chi
law,
rep
Army En
nical re
Army En
Labora
Army hie
Army Hu
ment C
Army ins
tary, I
Army Ma
east A
port, 1
Army Ma
AMC p
5721
1475
contra
employ
manuf
5-ye
militar
dex,
progra
(PE
public
5721
regula
1593
report
por
safety
Army M
orat
Fitzal
1201
148
report
Army M
annua
inter
physic
tun
Army N
Army P
rescal
USAF
422
USAF
422
Army R
report
resear
Army R
Army S
gram
Army S
new
61
techn
Army
USA
Army
techn
Armyw
8805
Arnett
Marl

Army Department—Continued
pamphlets, 103, 1763-65, 3461, 4211-12,
5732-37, 7383-89, 8882-84, 10264-269,
11957-991, 13294-300, 14795-800,
15039-942, 17380-384
publications, price list, 15669
technical manuals, 105-115, 1767-72,
4213-18, 5740-46, 7390-7402, 8885-94,
10270-282, 11994-995, 13301-304,
14801-803, 15945-954, 17386-387
transportation and travel, worldwide
cargo costs guide, pamphlet, 17380
water resource projects under jurisdiction,
change in name—
law, 12181
reports, 9297, 13630
Army Engineer Division, North Pacific, tech-
nical reports, 2201, 4729, 10949
Army Engineer Research and Development
Laboratories, news releases, 3718
Army historical series, 1397
Army Human Factors Research & Develop-
ment Conference, 1966, proceedings, 4219
Army installations, see Installations (mili-
tary).
Army Map Service, briefing map of South-
east Asia, print as House document, re-
port, 16228
Army Materiel Command:
AMC pamphlets, 95, 1749-51, 3843, 4192,
5721, 7376, 10251-252, 11981, 13289,
14788, 15927-928, 17372
contractors guide, 8880
employment bulletin, 13305
manufacturing methods and technology,
5-year program, 15943
military publications and blank forms, in-
dex, 10251
program evaluation and review technique
(PERT), Army programs, 1752
publications and blank forms, indexes, 95,
5721, 13289, 15927
regulations, AMCR (series), 1752, 14789,
15929
reports, register of approved-recurring re-
ports, 1749, 7376, 11981, 14788, 17372
safety manuals, 14789, 15929
Army Medical Research and Nutrition Lab-
oratory:
Fitzsimons General Hospital, reports,
120-122, 5753-54, 7412-15, 10295,
14806-807
reports and reprints, bibliography, 7416
Army Medical Service:
annual report, 1966 fiscal year, 15956
internship program, benefits, etc., 10294
physical therapists, educational oppor-
tunities, 4230
Army National Guard, see National Guard.
Army Personnel Research Office:
research publications, 1966, abstracts, 7405
USAPRO technical research notes, 118,
4224-26, 5750-51, 7403-5, 10282A-283
USAPRO technical research reports, 119,
4227-28, 5752, 7406
Army Research Office (Durham):
reports, 96, 8876
research in progress, 11993
Army Reserve magazine, 3044
Army Security Agency, command safety pro-
gram manual, 15934
Army Strategic Communications Command:
new headquarters at Fort Huachuca, Ariz.,
6155
technical manual, 7377
Army Transportation Engineering Agency,
USATEA reports, 14805
Army Transportation Research Command,
technical report, 8895
Armyworms, fall, mass rearing in laboratory,
8805
Arnett, Alvin J., proceedings of Merchant
Marine Council, 3773, 12125

Arnhoft, Franklyn N., current status of
mental health personnel supported under
National Institute of Mental Health train-
ing grants, 2839
Arnold, Charles J., relief, 7637
Arnold, Dean E., marking fish with dyes and
other chemicals, 4812
Arnold, Dorothy E., measurement of serum
ionic calcium using specific ion electrode,
13271
Arnold, J., mathematical computer programs,
5196
ARO, see Aerospace Research Office.
ARO-D reports, 96, 8876
Aromanto, Tony, Atlantian, 3049
Aromatic compounds, polyaromatics con-
verted into structural material by iso-
static compression process, 12898
see also Hydrocarbons.
Aroostook County, Maine, Island Falls quad-
rangle, bedrock, geological-geophysical
investigations, 6401
Arousal as factor in reminiscence, 9981
Arpaai, Dale J., controls analysis of nuclear
rocket engine at power range operating
conditions, 11525
Arresters, see Lightning arresters.
Arrests, Immigration and Naturalization
Service officers authority to make arrests,
15318
AKS series, 2-9, 1672-74, 4083-86, 5616,
7241-52, 8803-8, 10147-156, 11915-922,
13196-203, 14733, 15824-827, 17299-300
Arsenic stereochemistry of organic com-
pounds, USSR study, 1209
Art:
battle art, AEF, 1918, exhibition, 8680
National Foundation on the Arts and the
Humanities, purpose and activities as it
pertains to the arts, 6927
NAVNEWS 1967 portfolio, 7023
addendum, 17098
Stanton Macdonald-Wright, retrospective
exhibition, 11595
State arts activities, summary, 6930
works and reproductions, catalog of copy-
right entries, 968, 2141, 6137, 17682
see also Paintings.
Art and Antiquities of Capitol Commission,
establish, report, 9274
Arteries:
anatomy and DC characteristics of system,
with introduction to AC characteristics,
11405
carotid and femoral, blood flow in hyper-
thermic cats, 5710
Artesian water in Tertiary limestone in
Southeastern States, 6399
Arthritis, arthritis and rheumatic diseases
abstracts, 3045
see also Osteoarthritis—Rheumatoid ar-
thritis.
Arthropod borne diseases, reported incidence
of arthropod borne encephalitis of equine
in United States, 1965 calendar year, 7255
Arthur, H. B., United States food and fiber
system in changing world environment,
18144
Articles of Confederation, text, 10691
Artifacts, see Paleontology.
Artificial blood circulation, see Blood.
Artificial intelligence, techniques, applica-
tions to spacecraft control problem, 12854
Artificial kidneys:
bibliography (periodical), 11718
what it is, how it works, 18152
Artificial recharge of ground water (series),
16700
Artificial satellites, see Satellites.
Artists, Isleta paintings, artist in pueblo
society, letters, etc., 14547

INDEX 1967

Artists' materials, national defense education act, loans to private nonprofit elementary and secondary schools for equipment and materials, 1007

Arts, Advisory Committee on, *see* Advisory Committee on the Arts.

Arts and crafts:

- Army crafts program, 4th dimension is you, career opportunity, 7382
- Indian and Eskimo sources, list—individuals, 12640
- organizations, 12639
- opportunities for girls (address), 8796
- promote progress of useful arts, report of President's Commission on Patent System, 2796, 6053
- print as Senate document, report, 4598

see also Handicraft.

Arts and the Humanities, National Foundation on, *see* National Foundation on the Arts and the Humanities.

Aryl compounds, aryleneisloxane copolymers, 9843

Asaad, Blanche L., relief, 576

Asaad, Ezzat N., relief, 575

Asbell, Bernard:

- medical training costs too much, 10934
- new directions in vocational education, case studies in change, 17719

Asbestos:

- chrysotile, lizardite, and antigorite, solution studies, 8160
- colloidal fibrils as reinforcements for polymeric structures, 16914
- phenolic impregnated, debulking and curing, improved method, 1457

Asci, Antonina K., relief, 10547, 13518, 13754

Ascorbic acid, *see* Vitamins.

ASCS, *see* Agricultural Stabilization and Conservation Service.

ASCS background information BI series, 19, 5621, 8816-17, 13207

ASECNA, *see* Safety of Air Navigation in Africa and Madagascar Agency.

Ash (tree):

- dieback, detection and classification on large-scale color aerial photographs, 8116
- seed bed density affects size of 3-0 green ash nursery stock, 14095

Ash trays, *see* Trays.

Ashby, Charlotte M., cartographic records of Forest Service, 14510

Ashe, Hubert, relief, 13622

Asher, Janice M., use of computers in analysis of experimental data and control of nuclear facilities, 14808

Ashe:

- coal ash, spectrochemical analysis, 14342
- fly ash utilization, symposium, proceedings, 14329

Ashizawa, Roy Y., mineral industry of Hawaii, 2553

Ashley, Burton E.:

- mineral industry—
- British Honduras, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama, 14331
- Ecuador, French Guiana, Paraguay, and Uruguay, 11361
- Islands of Caribbean, 14332
- Mexico, 12804

Ashley, Victor L., relief, 13591

Ashville, Ala., bauxite deposits, 2356

Asia:

- arms sales to South Asian countries, hearings, 15155
- Asia, Pacific and United States, hearing, 6099
- central and southeast, study mission, report, 9181

Asia—Continued

- central, deserts—
- description, 16777
- formation, and nature of Sinkiang, study, 6585
- geographical study, 2434
- contributions to hydrology of Asia and Oceania (series), 11187
- East Asian and Pacific series, 7143, 8713-16, 11822-824, 13137-138, 146752-673, 17218-220, 18228-229
- east, functional bibliography, 5526
- health information for travel, 13078
- maps of continent, including indexes, etc., 16153
- print as House document, reports, 16228, 16359
- market indicators, 9013
- Pacific Coast, tidal current tables, 16087
- peace in Asia, importance, message from the President, 16163
- promise of new Asia, U.S. policy in Far East as stated by President Johnson, 2880
- rural development, hearings, 7745, 13705
- south—
- functional bibliography, 11832
- market profiles, 13456
- regional mineral industry review, minerals yearbook chapter, 8373
- south and east, translations, 3965
- southeast—
- background information, revision, 13860
- Government-owned vessels supporting military activities, potential savings in financing, Maritime Admin., GAO report, 14137
- maps, including indexes, etc., 16153
- print as House document, reports, 16228, 16359
- military construction appropriations, 1968, hearings, 16305
- military construction authorization, 1967, supplemental hearings, 7799
- military construction authorization, 1968—
- hearings, 13695, 16395
- law, 17555
- reports, 13684, 13688, 16284, 16371
- military operations, supplemental appropriations, 1967—
- hearings, 6031
- proposal, 4492
- neutralization, problems and prospects, study, 2116
- resolution to promote maintenance of International peace and security, hearing, 954
- selected functional and country bibliography, 12141
- U.S. Air Force tactical air operations, report, 10813
- U.S. Navy and Marine Corps status, report, 10815
- visit of special subcommittees, reports, 714, 10635
- United States trade, Communist areas, 16108
- weather records, 9435
- west, agricultural situation—
- midyear reviews, 991, 16494
- 1966 review and 1967 outlook, 10924

Asian Development Bank:

- appropriations, 1968, hearings, 15014
- establishing agreement, 5539
- inaugural meeting (statement), 2957
- United States contribution, authorize—
- hearings, 17650
- message from the President, 16163

Asimov, Isaac, critique on life in 1990, article from Literaturnaya gazeta, 12729

Aspect ratio, *see* Wings (aircraft).

Aspen:

influence of growth media, temperatures, and light intensities on root and top growth, 14091

quaking, veneer yields from Lake States, 1095

site index table in southern and central Rocky Mountains, 2310

wood characteristics, properties, and uses, review of recent literature, 14134

Asphalt, winter construction practices, earthwork, survey, 98

see also Roofing.

Aspirators, use to increase relief valve poppet stroke, 12590

ASPS series, 6139, 7847, 16456

Assateague Island National Seashore, general information, 15608

Assaying:

assigning area of influence for assay obtained in mine sampling, 12815

correlation between assay values and unequal sample internal values, investigation, 2571

fitting surfaces to assay and other three-dimensional data by quadratic-regression analysis, computer method, 2580

linear discriminant analysis of multivariate assay and other mineral data, 6680

mine and mineral-deposit sample and assay data analyzing, statistical techniques, 14322

see also Radioassaying.

Assemblies, see Weapons.

Assessments, see Taxation.

Assets and liabilities, see Banks and banking—Federal reserve member banks—Sales.

Assets of poor and near poor, 7130

Assistance, see Public assistance—Social work and problems.

Associate training programs in medical and biological sciences at National Institutes of Health, 5420

Association and Industry Management Service for Small Business, general information, 15729

Association of ideas, paired-associate learning experiments, confidence in recall, 13262

Astacidae, see Crustaceans.

ASTM, see American Society for Testing and Materials.

Astrometry, problems, 14501

Astronautics:

chronology on science, technology, and policy, 1441

Earth-Mars-Earth flight, minimum time with unregulated low-thrust engine, USSR study, 17881

effects of space-flight factors on—functions of central nervous system, 12973

some bodily functions, USSR study, 2439

manned space flight—

biological problems, USSR study, 6485

biomagnetic considerations, 16911

cardiovascular and respiratory reactions of crewmen during Voskhod-2 orbital flight, 6555

dental kit encasement for use on space missions, 17353

emergencies and space flight safety, survey, 9171

emotional state of man, analysis of intonational characteristics of speech as criterion, 6507

extended time periods, life support system, 1425

feeding systems, characteristics, concept for improvement, and public health implications, 15898

medical and biological problems, USSR study, 1315

Astronautics—Continued

normal human serum parameters during, 7341-42

Project Apollo, NASA facts, 8431

Project Mercury, history, 8438

Projects Mercury and Gemini, NASA facts, 17949

near-space environment, 11575

news of Soviet aviation and cosmonautics, 1311

space flight investigations—

and research, summary, 17021

opportunities for participation, 11576, 17018-19

use of Jupiter gravity turns for tailoring trajectories to Saturn with consideration of launch opportunities, 2692

space vehicle flight control systems, analysis and design, 12871-876, 14383-384, 15497-503

see also Bioastronautics.

Astronauts:

capabilities to perform extravehicular functions in weightless conditions, 15507

extravehicular protection and operations, study, 12859

incidence of ear, nose, and throat diseases in candidates, 14781

lunar explorers, self-locomotive performance based on experimental reduced-gravity studies, 11501

magnetic fields of planets, spacecraft and outer space, effects, 16911

NASA space flight team, 11423

pilot controlled docking simulation of Apollo command and service module with lunar module, 2689

piloted simulation study of manual guidance of upper stages of large launch vehicle, 9887

response speed, frequency, and flexibility, review, analysis and device demonstration, 16904

Voskhod-2 orbital flight, cardiovascular and respiratory reactions, 6555

Astronomers:

examination announcement, amendment, 17453

Polish Society of Amateur Astronomers, statute, 17863

Astronomical observatories, Rumanian Academy of Sciences, activities, 1290

Astronomy:

astronomical phenomena, 2769, 15622

astronomy in space, 8434

distance responses by Air Force Officers in mental status examinations, 4174

Soviet bloc research (periodical), 3886

X-ray, celestial sources, high angular resolution studies program, 8428

see also Astrometry.—Stars.

Astrophysics:

American meteorological Society abstracts, 3636

Byurakanskaya Astrophysical Observatory, USSR, general information, 1198

problems, USSR studies, 6276, 15582

research opportunities, 1967-68, Smithsonian Astrophysical Observatory, Cambridge, Mass., 1601

Smithsonian contributions, 2859, 8683, 18204

Asymptotic expansions, see Mathematics.

Asymptotic methods in theory of linear differential equations, 12976

Asymptotic solutions, see Mathematics.

Athafalaya River and Valley:

engineers report—

departmental edition, 15224

document edition, 14930

Gulf outlet, navigation maps, 8383

Ateles geoffroyi, see Monkeys.

Athens, Greece, desalting for, preliminary study, 10314

INDEX 1967

Atherosclerosis, experimental, metabolism of nucleic acids, phosphoproteins, and phospholipids of liver, USSR study, 1275

Athletic goods, see Sporting goods.

Atkinson, William A., clearcut harvesting costs and production rates for young-growth mixed-conifer stands, 4841

Atlanta, Ga.:

- area wage survey, 14291
- stresses in rock outcrops, 1409

Atlantian (periodical), 3049

Atlantic alliance:

- concert and conciliation, next stage (address), 18232
- current views, 10838
- unfinished business, 6108

Atlantic Coast:

- coast pilots—

 - Cape Cod to Sandy Hook, 7556
 - Cape Henry to Key West, supp., 5913
 - Eastport to Cape Cod, supp., 5942
 - Gulf of Mexico, Puerto Rico, and Virgin Islands, 17467
 - supplement, 7553
 - Sandy Hook to Cape Henry, 4414, 7557

- Continental Shelf and slope, geologic background, 4889
- hurricane survey, engineer reports—

 - Beaufort Inlet to Bogue Inlet, N.C.—

 - departmental edition, 2203
 - document edition, 1906

 - Bogue Inlet to Moore Inlet, N.C.—

 - departmental edition, 2204
 - document edition, 1997

 - Cape Fear to North Carolina-South Carolina State line—

 - departmental edition, 2205
 - document edition, 2005

- light lists—

 - Little River, S.C. to Rio Grande, Tex., and Antilles, 12123
 - St. Croix River, Maine, to Little River, S.C., 14877

- nautical chart catalog, 4415
- North America, tidal current tables, 215, 16086
- storm warning facilities chart—

 - Cape Hatteras, N.C. to Brunswick, Ga., 14718
 - Eastport, Maine to Montauk, N.Y., 14719
 - Manasquan, N.J. to Cape Hatteras, N.C. and Chesapeake Bay, 14720
 - Montauk Point, N.Y. to Manasquan, N.J., 14721

- transportation lines, 13984

Atlantic community, selected bibliography, 15752

see also Organization for Economic Co-operation and Development.

Atlantic Fleet, status and combat readiness, report, 10812

Atlantic Ocean:

- North—

 - southwestern, collection by exploratory fishing vessels, correction, 8035
 - station Charlie, oceanographic observation, 10444
 - trawl nets, 15256

- northwest—

 - fisheries convention of 1949, multilateral understanding, Protocol, 2896
 - inventory of exploratory longline fishing effort and catch rates for tunas and swordfish, 14063
 - water masses and density stratification, atlas, 11629
 - notice to mariners, 3641
 - radio navigational aids, changes, 5336, 9974, 11646, 14580, 18102
 - radio weather aids, changes, 1540, 9975, 14581

- tropical—

 - Equalant III data report, 8569
 - seabirds, identification manual, 2752
 - western, snappers, field guide, 8019

Atlantic-Pacific Interoceanic Canal Study Commission:

- annual report, 14929
- appropriations, 1967—

 - decrease, amendment, 10496
 - law, 403

- appropriations, 1968—

 - hearings, 10634, 16393
 - report, 13678

- appropriations, 1968, authorization, increase—

 - hearing, 12403
 - report, 12367

- investigations and studies, sea level canal site, final report, extend termination date, hearings, 10664
- termination date, extend—

 - hearing, 12403
 - report, 12367

Atlantic Scientific Research Institute for Fisheries and Oceanography, USSR, economic-mathematical and cybernetic research at AtlantNIRO, 1202

Atlantic States:

- Coastal Plains Economic Development Region, designating (remarks), 1955
- floods, South Atlantic slope basin, Ogeechee River to Pearl River, 2374
- Mid-Atlantic power failure, June 5, 1967, hearings, 13550
- Middle, fisheries, annual summary, 8017
- north Atlantic slope basins, surface waters, quality, 8184, 17834
- south—

 - fisheries, annual summary, 9505
 - strawberry culture, 1685

- south Atlantic slope basins, surface waters, quality, 8184, 17834

Atlantida, case study in household sample surveys, 182, 1855, 4360, 7497, 10387

Atlantida, un estudio de caso en encuestas de hogares por muestra, 5898-99, 7496

AtlantNIRO, see Atlantic Scientific Research Institute for Fisheries and Oceanography, USSR.

Atlases:

- atlas of off-road ground roughness P.S.D.'s, etc., 4195
- catalog of copyright entries, 12433
- congressional districts, 90th Congress, 1858
- Indian Ocean, interpolated values of depth, salinity, etc., 15624
- isothermal and isophotic atlas of moon contours through lunation, 16894
- July oceanographic conditions in northeast Pacific Ocean, 8041
- oceanographic, Tampa Bay and adjacent waters of Gulf of Mexico, 12545
- water masses and density stratification, western north Atlantic Ocean, 11629
- world atlas of atmospheric radio refractivity, 4747

Atmosphere:

- atmospheric data, mixed frequency distributions, estimation, 12947
- atmospheric emissions from nitric acid manufacturing processes, 5428
- atmospheric transmission of infrared radiation from 2-5 microns for slant paths from 35,000 ft. to upper limit of atmosphere, survey, 12931
- combustibility of materials in oxygen-helium and oxygen-nitrogen atmospheres, 5706
- controlled—

 - fruit storage, development, 7959
 - quality and display life of carnation blooms after storage, 15863

- density between altitudes of 180 KM and 300 KM, investigation, 8860
- effects on—

 - characteristics of maximum-size radio-telescopes, USSR study, 5012

Atmosphere—Continued

- effects on—continued
 intestinal and skin flora—
 experimental data, 9799
 literature survey, 2613
 errors in microwave azimuth measurements, experimental study, 2224
 fire protection problems for special atmospheres, including oxygen, 17816
 flammable, temporary lights, maritime safety data, 17589
 hyperbaric, containing oxygen, nitrogen, and/or helium, flammability of materials, preliminary studies, 11675
 investigating with rockets and satellites, methods, 6911
 lower 100-m layer, recurrence of temperature and wind velocity combinations, experimental calculation, 11565
 Mars, feasibility study of experiment for determining properties, 14371
 Martian, water vapor, particulate matter, and carbon dioxide profiles, flyby measurements, 15569
 metastable molecules, 4153
 naval weather service computer products manual, 15618
 nuclear submarine, purification and control, chemical research status, annual progress report, 17084
 optical radar measurements, 5420
 oxygen-helium, man's exposure—
 behavior factors, 86
 clinical observations, 90
 enteric microbial flora, 79
 excretion of steroids and catecholamines, 7366
 exercise and cardiovascular response, 88
 feeding bite-size foods, 82-83
 heat exchange, 81
 introduction and general experimental design, 91
 major and minor atmospheric components, 89
 oral, cutaneous and aerosol bacteriologic evaluation, 84
 renal response, 87
 respiratory function, 80, 92
 selected blood enzyme response, 85
 Park Range atmospheric water resources program, phase 1, 11774
 particle, improved analyzer, 15529
 planetary—
 outgoing infrared radiance, theoretical computations, 14457
 predictions of shock-layer radiation from molecular band systems, 6890
 structure, from on-board measurements of pressure, etc., 9904
 Venus and Mars, investigation, 5276
 prebiological, thermodynamic equilibrium, 11426
 recycled, removal of strong acid gases by dry-packed beds, 5350
 safety in industry, maritime safety data for shipyards, shipboard ventilation for hazardous atmospheres, 8299
 space-cabin atmospheres—
 engineering tradeoffs of one-vs.-2-gas systems, literature review, 12879
 oxygen choice for spacecraft, Apollo accident, hearings, 6088-89, 9299, 10796, 12396
 physiological factors of inert gases, 9823
 selection, engineering criteria, 16912
 tissue oxygenation during hemorrhage in dogs breathing 1 and 3 atmospheres of oxygen, 15899
 trace contaminants in closed ecologic atmospheres, analysis, 7350
 tropospheric radio duct meteorology at VHF and UHF in theory and as observed on trip around world, 1551
 U.S. standard atmosphere—
 1962, corrigenda, 17023
 supplements, 17024

Atmosphere—Continued

- upper—
 microorganisms, 66-68, 1732-33
 radioactivity sampling, agreement with Australia, 5538
 sampling radioactivity by means of balloons, agreement with Australia, 2923
 water—
 substance continuity, water formations, etc., 15231
 vapor observations, 5362
 yield increase through technology development plan, 5480
 what should cosmonauts breathe? USSR study, 5019
see also Mesosphere—Stratosphere.
 Atmospheric electricity, recording, use in fog forecasting, 8590
 Atmospheric entry :
 Apollo aircraft, infrared equipped for reentry tracking, navigation accuracy, 1507
 deduction of reentry plasma properties about manned orbital spacecraft from radio signal attenuation data, 14494
 entry flight aerodynamics from Apollo mission AS-202, 17009
 heat-transfer measurements on rotor blade of rotor entry vehicle model, 12965
 high-drag entry shapes, aerodynamic investigation at Mach 15.4, 16986
 laminar separations using Crocco-Lees mixing parameter, analytic method, investigations, 9806
 landing characteristics of dynamic model of HL-10 manned lifting entry vehicle, 2685
 lateral, directional handling qualities of piloted re-entry vehicles, 12860
 planetary atmospheres, prediction of shock-layer radiation from molecular band systems, 6890
 planetary entry, heat-transfer and temperature distribution of conical porous membrane, 11554
 reentry trajectories, ballistic, at velocity of 50,000 f.p.s., 12932
 Atmospheric pressure :
 high ambient pressure, effects on breathing, 12792
 hypobaric and hyperbaric pressure effect on cell permeability, initial observations, 7356
 low pressure normoxic environments, effect on oxygen uptake in mice, 76
 upper stratosphere and mesosphere, measurements, 17012
 Atmospheric refraction, world atlas of atmospheric radio refractivity, 4747
 Atmospheric Research, National Center, *see* National Center for Atmospheric Research.
 Atmospheric Turbulence and Diffusion Laboratory, ESSA technical memorandum, IERTM-ATDL, series, 9427
 Atomic absorption :
 determination of gold in geologic material by atomic absorption spectrometry, 16688
 spectrophotometry, modified method for determining uranium isotopes, 13368
 Atomic auxiliary power generators, SNAP-8 alternator speed controller and alternator performance results, voltage distortion effects, 12950
 Atomic blasting :
 nuclear explosives, possible use in construction of sea-level canal (remarks), 1819
 Plowshare program, civil, etc., used for nuclear explosives, 13342, 15962, 17394-398
 potential effects of Project Chariot on local water supplies, northwestern Alaska, 2369
 Atomic clocks, nuclear clocks, description, use, etc., 7442

INDEX 1967

Atomic debris, see Radioactivity.

Atomic energy:

act of 1946, compilation, 1979
animals in atomic research, uses, etc., 15977
atoms and the ocean, role of nuclear energy in exploring, etc., radionuclides in ocean, 15978
civilian nuclear power, report to the President, 1962, 1967 supplement, 7436
code of Federal regulations, 12521
coolants for nuclear power, engineering installations, USSR study, 1260
cooperation for civil uses, agreement with—
Argentina, application of safeguards of IAEA, 2893
Australia, 14687
application of safeguards by IAEA, 7160
Austria, 7171
Brazil, 7167
China, Republic, 2929
Indonesia, 7165
Iran, 10103
Israel, 7157
application of safeguards by IAEA, 5533
Philippines, 13144
South Africa, 15901
application of safeguards of IAEA, 17240
Spain, application of safeguards of IAEA, 8736
Sweden, 2910
Switzerland, 2900
Turkey, 2898
cooperation, international agreements, hearings, 1973
desalting and energy development and utilization, policy considerations, 15969
dove variety (remarks), 7435
energy dependence of free radical production in alanine, 1744
energy required to produce electron-hole pair in silicon by tritons, 1501
fundamental nuclear energy research 1966, 4241
high energy physics, physical research, summaries of projects supported by AEC, 13344, 15966
industry and government, complementary roles (remarks), 131
international conference on instrumentation for high energy physics, 1966, proceedings, 7419
legislation through 89th Congress, 2d session, compilation, 4558A
levels, X-ray, 17036
nuclear education activities, guide, 5796
nuclear energy for—
electric power (remarks), 8914
water desalting, bibliography, 12014
nuclear facilities, routine surveillance, report, 7065
nuclear industry—
1966 report, 1816
1967, report, 17406
nuclear materials management, AEC-contractor meeting, 13316
nuclear power—
and Navy (remarks), 7439
and Northwest (remarks), 1817
briefing for coal industry, 8904
for water desalination (remarks), 10313
new look (remarks), 10310
next decade of development (remarks), 8915
policy and prospects (remarks), 1818
sources, study, 7756
2 years after Geneva (lecture), 133
U.S. program (remarks), 8919
nuclear power-desalting combination project—
hearings, 7749, 7813
laws, 375, 10487
reports, 675, 6078, 7731, 9125

Atomic energy—Continued

nuclear proliferation problem (remarks), 12020
peaceful uses—
new world, cooperative use of atomic energy (remarks), 12022
nuclear energy, generation of progress (remarks), 12023
of nuclear energy (remarks), 4243
proliferation of peaceful atom (remarks), 10315
power from radioisotopes, 7444
products, current industrial reports, 16002
program, in Lahore, Pakistan (remarks), 4244
programs, major activities, 7437
publications, price list, 1564, 17136
reactor energy release by nonuniform fuel distribution, experimental study, USSR, 1295
research progress reports—
Agricultural Research Laboratory, University of Tennessee, progress report, 7425
New Brunswick Laboratory, 13332
Plasma Physics Laboratory, 13330
scientific progress and application to have worldwide problems (remarks), 15974
two partnerships for nuclear progress (remarks), 8918
understanding the atom series, 7442-45, 15977-978, 17498-409
index, 17409
use, general information, 8912
USSR, recent developments, 9623
Atomic Energy Agency, International, see International Atomic Energy Agency.
Atomic Energy Commission:
AEC-contractor nuclear materials management meeting, 13316
AEC-NASA liquid metals information meeting, 125
AEC-NASA tech briefs, 5139-56, 6695-6704, 8384-8404, 9793-98, 11390-392, 12832-845, 14363-369, 15485-494, 16877-887, 17919-932
AEC research and development reports, 123-129, 174-1812, 4231-38, 5755-95, 7417-33, 8901-11, 10297-304, 12006-19, 13313-349, 14808-809, 15958-969, 17390-400
AEC symposium series, 10297, 12003, 14808, 15959
Air Cleaning Conference, Boston, Mass., Sept. 13-16, 1966, proceedings, 12004
airborne radiometric reconnaissance, 1952-56, maps, 1801-3
appropriations, 1967, public works—
hearings, 939
law, 403
appropriations, 1968, amendments, 7600, 10509
appropriations, 1968, authorizing—
hearings, 9041, 10491
law, 13536
reports, 13635, 13642, 13792
appropriations, 1968, public works—
hearings, 12257, 16393
report, 13678
authorize grants to States for record-keeping system for radiation workers, hearings, 1974
budget, 1968, decreasing, 9062
cataloging reports, corporate author entries, 13345
contracting for construction and architect-engineering services, guide, 13350
controlled thermonuclear research, policy and action paper, 1506
facilities, industrial accidents, 1956 revised summary, 15967
film catalog (16 mm), professional level, 5800
financial report, 17403
fundamental nuclear energy, 1966 research, 4241

Atomic Energy Commission—Continued
 further research and development in nuclear domestic and international safeguards (remarks), 12020
 General Advisory Committee, commemoration of 100th meeting, 8913
 Health and Safety Laboratory—
 fallout program, quarterly summary reports, 5774, 10299, 13324
 appendices, 5775, 10300, 13325
 standard procedures manual, 1795, 13336
 high temperature thermometry seminar, papers presented, 129
 library, mechanization of legislative information, 5790
 licensing guide, 15957
 news release index, 13312
 nuclear power-desalting project, authorize—
 hearings, 7749
 laws, 375, 10487
 reports, 675, 6078, 7731, 9125
 physical research in physics and mathematics, summaries, 12015
 press releases, 3705
 programs, major activities, 7437
 report—
 departmental edition, 7434
 document edition, 7767
 research in high energy physics, summaries, 13344, 15966
 rules and regulations, 3050
 selected products in low-dose food irradiation program, cost-benefit study, 10302
 selling to ABC, errata, 4245
 Speaker Bureau for Washington Metropolitan area, availability of speakers, 5798
 specialized information and data centers directory, 1814
 subject headings used in indexing nuclear science abstracts, 128
 telephone directory, 14810
 transferring control of land in Otowi section to—
 law, 407
 report, 4503
 uranium enrichment services and related matters, hearings, 1976
 Atomic Energy Joint Committee:
 committee prints, 4458A, 13542
 hearings, 1972-76, 9041, 10491, 12184
 reports, 675, 13635, 13792
 Atomic ordinance, Federal item identification guides for supply cataloging, supplements, 3293
 Atomic power, *see* Atomic energy.
 Atomic power plants, *see* Nuclear reactor power plants.
 Atomic warfare:
 civil defense, protection against what, programmed orientation to civil defense, 13428
 damage effects estimation techniques, 13426
 nuclear defense, Army field manual, 1758
 radiological countermeasures ashore, 17068
 Atoms:
 atom and evil, problem of nuclear proliferation (remarks), 12020
 atom in world affairs (remarks), 130
 atoms and the ocean, role of nuclear energy in exploring, etc., radionuclides in ocean, 15978
 atoms for sale, visit to USSR isotope center, 16770
 Atoms in Action, Nuclear Science Demonstration Center, Panama City Panama—
 opening ceremonies (remarks), 8916
 operations (remarks), 8917
 free-stream atom concentration in hypersonic flow, use of self-calibrating catalytic probes to measure, 11408

Atoms—Continued
 new problems in safeguarding the atom (remarks), 12021
 optical orientation, maximum response of magnetometer, USSR study, 17870
 peaceful atom comes to Hawaii (remarks), 12025
 understanding the atom series, 7442-45, 15977-978, 17408-409
 index, 17409
 volume ion production costs in tenuous plasmas, general theory, 15377
 Attaches, *see* Agricultural attache.
 Attachment:
 exemptions, in case of nonresidents, amend D.C. code, report, 9086
 wage garnishment, prohibit, hearings, 17594
 Attack and defense (military science), *see* Military art and science.
 Attendance, full-time, school certification for social security purposes, 15743
 Attention, new veterans! older veterans!, 15220
 Attenuation:
 diode discriminator threshold, transistor biased amplifier minimizes, 16883
 microwave, measurements and standards, 8523, 14515
 ultrasonic—
 for free electrons in presence of magnetic field theoretical investigation, 2705
 in superconducting niobium, 5273
 Attitude control, *see* Satellites—Spacecraft.
 Attitude indicators, developmental instrument supplies accurate attitude and attitude-rate data, 6770
 Attitude instrument flying, change, 1707
 Attitudes, past and future, 1813
 Attix, Frank H., luminescence dosimetry, 10297
 Attorney General, *see* Justice Department.
 Attorneys, *see* Lawyers.
 Auctions, livestock, hwy packers and stockyards act applies, 15870
 Audio frequencies, accurate phase-angle measurements, standard, 6924
 Audio-visual education:
 Army audio-visual support center operations, field manual, 4206
 audiovisual materials, sources, 7912
 circulation of visual and auditory materials of educational, scientific and cultural character, agreement and protocol, 5546
 educational, scientific, and culture character—
 implement Beirut agreement—
 law, 371
 reports, 653, 903
 implement Florence agreement—
 hearing, 951
 report, 655
 Audiologist, examination announcement, discontinuance notice, 14861
 Audiology, professional careers, examination announcement, 13448
 Auditing:
 career, Defense Contract Audit Agency, 16459
 Commerce Department audit activities, efficiency, etc., GAO review, 14158
 food donation programs administered by nonprofit agencies, audit extent, GAO review, 8149
 Health, Education, and Welfare Dept., career, 7 good reasons for starting, 8195
 your professional auditing future, Defense Dept., 4683
see also for audit reports, names of corporations, etc.
 Auditors:
 Defense Contract Audit Agency, career opportunities, 9365

INDEX 1967

Auditors—Continued

- examination announcements, 4390, 12101
- amendments, 199, 201, 1908, 5919, 13438, 18067
- discontinuance notice, 7535
- internal auditor, Internal Revenue Service career for management-minded accounting graduates, 2405
- pay, national survey, 2507
- Auditory vigilance as affected by signal rate and intersignal interval variability, 11346
- Audubon, John J., 20-cent air mail postage stamp (poster), 8612
- Aune, Hazel V., public health personnel in local health units, 10059
- Aunon, Jose E., relief, 13769
- Aurex Corporation, relief, 7641, 13476, 13728
- Auscultatory blood pressure, *see* Blood pressure.
- Anuseon, Donald E., relief, 306, 844
- Ansmus, Norma F., current employment, market for engineers, scientists, and technicians, 4727
- Austin, L. G., fuel cells, 15514
- Australia:
 - atomic energy cooperation for civil uses, agreements, 7190, 14687
 - background notes, 13131
 - capsule facts for Armed Forces, 15017
 - Christmas Island, mineral industry, minerals yearbook chapter, 9759
 - cotton, recent developments, 2286
 - defense space research facility, agreement, 7189
 - east coast, sailing directions, change, 11636
 - education, Educational Foundation and financing of exchange programs, agreement, 15770
 - health information for travel, 13078
 - lights and fog signals, list, changes, 1537, 7004, 11642, 18099
 - market information on electronic products, 16105
 - mineral industry, minerals yearbook chapter, 5109
 - Nauru Island, mineral industry, minerals yearbook chapter, 9759
 - plant quarantine import requirements—changes, 13206, 17302
 - revised pages, 8311
 - radioactivity sampling of upper atmosphere, agreements, 2923, 5538
 - south coast, sailing directions, change, 11637
- Austria:
 - air transport services, agreement, 2905
 - atomic energy cooperation for civil uses, agreement, 7171
 - background notes, 10090
 - capsule facts for Armed Forces, 17367
 - mineral industry, minerals yearbook chapter, 8343
- Authors:
 - L. C. national union catalog, cumulative list, 3601
 - register of additional locations, 16838
 - progressive fish-culturist, cumulative author index, 1081
 - technical writer, examination announcement, 1931
- Autocorrelator electronic system, *see* Pulse autocorrelator electronic system.
- Auto-diagrammer, *see* Electronic comptuers.
- Automatic addressing system, 2145
- Automatic Control, International Federation, *see* International Federation of Automatic Control.
- Automatic data processing equipment, *see* Electronic data processing systems.
- Automatic feeding equipment for livestock and poultry, 8830
- Automatic machinery with variable structure, USSR study, 15382
- see also* Robots.

- Automatic Standard Magnetic Observatory, general information, errata, 5946
- Automatic system for analysis of time variant data, 4748
- Automatic typographic-quality typesetting techniques, state-of-the-art review, 9942
- Automation:
 - automatic analysis of microscopic objects, problems, working conference in Pushchino-on-the-Oka, 1219
 - automatic control—
 - determining courses of study, 1017
 - system, searchless adaptive variable structure, principle of construction, USSR study, 4933
 - automatic electronic test and check-out, definition of terms, military standard, 7861
 - automatic guidance of automobiles, prospects, USSR study, 16762
 - automating wool weaving looms, 1186
 - automation and banking structure (remarks), 6297
 - chemical production, all-Union scientific technical conference, 2454
 - dairy plants manufacturing ice cream and ice cream novelties, layouts and operating criteria, 1702
 - electronic circuitry used to automate paper chromatography, 12913
 - geodetic work, Hungary, 15365
 - machines for centralized control, USSR book, 4937
 - manpower and automation—
 - in perspective of long-term technological change, seminar on manpower policy and program, 2487
 - research notice, 3535
 - manpower, research monographs, 16793
 - Soviet research, 6199
 - technology—
 - Communist Chinese abstracts, 3117
 - East European abstracts, 3219
 - USSR abstracts, 4027
 - troop control, methodological problems, USSR study, 8273
 - working with automation, seminar, 11300
- Automatons:
 - determination of regularity by canonical equations, 6581
 - variable-structure automata, USSR study, 17861
- Automobile accidents, *see* Motor vehicle accidents.
- Automobile drivers, medical advisory boards for driver licensing, some State programs, 8638
- see also* Motor vehicle operators.
- Automobile graveyards, *see* Automobiles.
- Automobile insurance, study, report, 17578
- Automobile parking, *see* Parking of vehicles.
- Automobile parts, *see* Automobiles.
- Automobile seat belts, anchorages for seat belt assemblies in automotive vehicles, Federal standard, 6315
- Automobiles:
 - and air pollution, program for progress, 17470
 - automatic guidance, prospects, USSR study, 16762
 - Canadian agreement, implementation of automotive products trade act of 1965, annual report, 7803
 - commercial rental cars, revision of method of supplying by GSA, GAO report, 9553
 - consumer buying intentions, 1878, 5884
 - disposal, national problem, case studies, 8336
 - Fiat-Soviet plant and Communist economic reforms, report, 12291
 - print additional copies, report, 10594
- Instalment credit developments—
 - periodical, 7993
 - seasonally adjusted data, 7994
 - seasonally unadjusted data, 7995

Automobiles—Continued

- loan characteristics at major sales finance companies, 7992
- ownership and purchases, 1960-67, special report, 14832
- price indexes for 1967 model, 13832
- recent purchases and expected expenditures, report of U.S. households, 16027
- safety standards in national traffic and motor vehicle safety act of 1966 (remarks), 1964
- sedans, etc., standard models and special equipment requirements, military standard, 15189
- USSR industrial development, automotive industry, translations, 4015
- Automotive air pollution, 761
- Automotive parts, *see* Repair parts.
- Automotive tires, *see* Tires.
- Automotive trades, *see* Motor vehicles.
- Automotive vehicles, *see* Motor vehicles.
- Auxiliary power systems for lunar roving vehicle, 16891
- Avery, James P., Army fixed-wing cargo restraint design criteria analysis, 10280
- Avery, T. Eugene, forester's guide to aerial photo interpretation, 4097
- Aves, *see* Birds.
- Avian leukosis:
 - outline of diseases of complex, 50
 - viruses, paths of intracellular synthesis, USSR study, 6534
- Aviation, *see* Aeronautics—Aircraft.
- Aviation boatswain's mates, E 1 & C Navy training course, 7010
- Aviation electrician's mate 1 & C Navy training course, 11653
- Aviation fields:
 - airfield design emergency construction, general provisions, 4215
 - Army airfield-heliport design, general provisions and criteria, technical manual, change, 10274
 - drainage and erosion control structures for airfields, emergency construction, 110
 - drainage, surface facilities for airfields and heliports, emergency construction, 4214
 - arctic and subarctic, 7395
 - military, instrument approach procedure charts, 3555
 - pavements, evaluation concepts—Army technical manual, 10275
 - emergency construction, 7392
 - USSR test airfield of Soviet air forces, 16733
- Aviation fuels, *see* Motor fuel—Turbine fuel.
- Aviation machinists:
 - mate J 3&2, and J 1&C, Navy training course, supplement, 11654
 - mate R 1 & C, Navy training course, 14583
 - mate R 3&2, supplement, 11655
- Aviation maintenance administration man 1 & C, Navy training course, 7011
- Aviation medicine, *see* Medicine.
- Aviation ordnanceman, 3 & 2, Navy training course, 7012
- Aviation storekeeper, 3 & 2, Navy training course, 8575
- Aviation structural mechanics, *see* Mechanics (persons).
- Aviators:
 - aeronautical communications and pilot services, ATS handbook, 2991
 - agricultural, protect, case studies, 140
 - allergy and sinus disease, 14782
 - aortic insufficiency in flying personnel, 17348
 - category 2 operations general aviation airplanes, 17742
 - certificated pilot flight and ground schools, list, 11092

Aviators—Continued

- disorientation, fatal effects under either IFR or VFR 5801
- dizziness and vertigo, 17359
- flashblindness F-106B aircraft experiment, 17349
- flight navigator written examination guide, 2283
- hearing survey, 17356
- impairment of alrmaunship by alcohol, 4251
- incidence of ear, nose, and throat diseases in test pilot candidates, 14751
- instrument pilot examination guide, 6358
- light-aircraft pilots, non-instrument-qualified, performance during instrument flight, simple stability augmentation system, effects, 11519
- measurement of low frequency vibrations in big helicopters and their transmission to pilot, 11564
- medico-physiological incidences on pilot for flight patterns typical of VTOL, 11563
- memorandum for aviators, 3548
- military pilot training, requirements, and inventories, hearings, 13843
- of flight and bold men, 5704
- performance tests for operator-skills research, 1821
- physiological responses of pilots to severe weather flying, 5804
- pilot schools, Federal aviation regulations, 6241, 11000
- pilot vision, effect of age on binocular fusion time, 4253
- piloting, simulated performance, hangover effect of secobarbital, 7364
- pilots and flight instructors, certification, Federal aviation regulations, 1040, 4578, 6239, 7949, 10991, 12494, 14005, 16554
- private pilot, written examination guide, 14071
- response speed, frequency, and flexibility, review, analysis and device demonstration, 16904
- search and rescue operations for U.S. private pilots missing in foreign areas, 16329
- undergraduate pilot and navigator training, relationship of AFOQT scores to success, 13267
- see also* Notice to aviators.
- Avocado, production, use, value, 1965-66, by States, 14896
- Awards (arbitration):
 - National Railroad Adjustment Board, 2760, 5322, 6988-90, 8565, 9965, 11621-622, 14556-559, 15614-615, 17055-56
- Awards (incentive), *see* Rewards (prizes, etc.).
- Awbrey, Stuart, Peace Corps volunteer, 3676
- AWOL and consequences, 5736
- Axelton, Elvera A., ponderosa pine bibliography, 17805
- Axial compression, structural efficiency of ring-stiffened corrugated cylinders, 14470
- Axial fans, *see* Mechanical fans.
- Axial flow, *see* Flow.
- Axisymmetric vibrations of partially liquid-filled cylindrical containers, 12942
- Aydilott, John C., normal gravity self pressurization of spherical liquid hydrogen tankage, 18019
- Ayrshire cattle, *see* Cattle.
- Azerbaijdzhan Soviet Socialist Republic:
 - Academy of Sciences, annual meeting, 1966
 - activities discussed, 9668
 - retail and wholesale networks, problems, 1171
- Azimuth, microwave measurements, atmospheric errors, experimental study, 2224
- Azov, Sea of, lights and fog signals, list, changes, 1538, 5333, 11643, 18100
- Azovskoye More, *see* Azov, Sea of.

INDEX 1967

B

Babies, *see* Infants.
 Babitzke, Herbert R., columbium and tantalum alloy development, 11389
 Babylon, N.Y., population, special census of town, 16024
 Bachman, Earl E., recreation of facilities, personal history of their development in national forests of California, 17798
 Bachman, George O., geology and mineral resources of Salt Lake area, etc., 17821
 Bacillus thuringiensis, field testing for control of western hemlock looper, 14140
 Backer, Julie E., infant mortality problems in Norway, 17167
 Backfills, *see* Hydraulic mine filling.
 Bacsalmassy, John A., relief, 13770
 Bacteria and bacteriology:
 aerobic-bacteria culture apparatus employing new foambreaker, 10007
 aspects of 20 days in full pressure suits, 20 days at 27,000 ft. on 100% oxygen and 34 days of confinement, 6723
 bacteria of living and dead larvae of Porthetria dispar, 8075
 bacterial kidney disease of salmonid fishes, 4802
 bacteriology of clean rooms, 17937
 clostridium toxins and bacterial aerosols, microbiological studies, 11290
 combined propagation of unicellular algae and bacteria, Hungarian study, 12691
 enteric microbial flora of man in oxygen-helium atmosphere, 79
 food utensils, etc., examination procedure, 17164
 motility of bacteria, medium improved, 1737
 oral, cutaneous and aerosol evaluation of man in oxygen-helium atmosphere, 84
 radio-resistance, virulence and culture characteristics, effect of repeated treatment with gamma rays, 12018
 reactions to bacterial antigens after irradiation, USSR study, 9665
 see also Clostridium—Intestinal flora—Skin flora, also names and classes of bacteria.
 Bacterial flora, *see* Bacteria and bacteriology.
 Bacterial warfare, *see* Biological warfare.
 Bacterial wilt, *see* Wilt disease.
 Bacteriological warfare, *see* Biological warfare.
 Badges, postal service, permit use in theatrical, television or motion picture productions, report, 14975
 Badlands National Monument, general information, 6975
 Baer, Jack, relief, 851, 12329
 Baez Hernandez, Ramon, relief, 9206, 12149, 12216
 Baffin Bay, sailing directions, 9968
 Baffles (mechanics):
 flexible and rigid ring, for dumping liquid oscillations in large-scale cylindrical tanks, effectiveness, 8493
 thickness effects in fuel sloshing experiments, 2700
 Baggage, luggage, briefcases, and personal leather goods, current industrial reports, 3169
 Bagge, Carl E., nomination, hearing, 15153
 Bagnell, Douglas B., relief, 655
 Bagot-Rush Agreement Days, *see* Rush-Bagot Agreement Days.
 Bagpipes, duty-free treatment, reports, 7685, 15104
 Bags:
 Bag sewing operation, how to inspect chart, 9688
 sacking, quick-change attachment for harvesting cotton research plots, 13198

Bahamas:
 foreign trade regulations, 7576
 long range proving ground, agreement, 17241
 Bahrain, *see* Bahrain.
 Bahrain:
 foreign trade regulations of Arabian Gulf States, 17480
 geology, 6405
 Bail, return of fugitive bailees, hearing, 6117
 Bailey, Curtis R., oxidizer-rich oxygen-hydrogen combustion characteristics, 2708
 Bailey, Harry E., programs for computing equilibrium thermodynamic properties of gases, 9898
 Bailey, James E., launch vehicle wind and turbulence response by nonstationary statistical methods, 15505
 Bailey, John M., two supply cooperatives serving low-income farmers, analysis in Appalachia, 2231
 Bailey, Leslie F., tables of folded sin x/x interpolation coefficients, 4413
 Bailey, Marion C., effects of dielectric covers over cross slots in rectangular waveguide, 18027
 Bailey, S. O., using parallel-T network for developing quadrature voltages at variable frequencies, 5361
 Bailey, Warren R., organizing and operating dryland farms in Great Plains, summary of regional research project GP-2, 7883
 Bailey bridges, panel type, technical manual, 1768
 Baird, Charles F., nomination, hearing, 15148
 Bairrington, Jarrell D.:
 anticoagulant effect of hemophilic blood, prolongation of clotting, etc., 10244
 effects of monomethylhydrazine on coagulation mechanism, 17361
 hemostasis and coagulation, 7340
 in-vivo inactivation of factor VIII (anti-hemophilic globulin) by hydrazine, its relation to fibrinolytic mechanism, 14771
 laboratory control of anticoagulation therapy, 17358
 Bait, Federal baiting regulations, waterfowl, questions and answers, 15258
 Baja California:
 bathyl and abyssal gammaridean Amphipoda of Cedros Trench, 17046
 sardine and anchovy larvae distribution, etc., in California Current region, 8036
 Baker, Albert F., pressure drop across fixed beds of anthracite briquets and blast furnace materials, 11375
 Baker, Charles E., thermal conductivities of ordinary and deuterated gaseous hydrogen fluoride and their equimolar mixture, 12961
 Baker, John A.:
 addresses, etc.—
 Dec. 5, 1966, 4109
 Dec. 6, 1966, 4095
 May 26, 1967, 13239
 May 29, 1967, 13246
 June 20, 1967, 13238
 July 18, 1967, 13208
 Aug. 26, 1967, 15875
 Baker, Olive G., national patterns of R&D resources, funds and manpower in United States, 14562
 Baker, P. S., isotopes and radiation technology, quarterly technical progress review, 3449
 Baker, Roy V., gin trash collection efficiency of small-diameter cyclones, 15824
 Bakers and bakeries:
 baking industry, organization and competition, revised page, 5297
 field bakery operations, technical manual, 15947
 Baking, *see* Bakers and bakeries—also names of foods baked.
 Balance (meteorology), *see* Meteorology.

Balance of payments:
 adjusting deficits through capital accounts (remarks), 4781
 balance of payments and business outlook in United States (remarks), 5949
 barter contracts for diamonds for stockpile, GAO report, 15293
 corporate voluntary, program and lawyer (remarks), 224
 dilemma of national balance of payments strictures and international development needs (remarks), 2949
 Federal Reserve looks at (remarks), 2261
 in 1966, 11048
 interest equalization tax act on foreign securities, extend—
 digest of testimony and statements, 9176
 hearings, 6047, 13859
 law, 13539
 legislative histories of P.L. 90-59 and P.L. 89-243, 15052
 reports, 7670, 7708, 13689, 13823
 international, capital, markets and financing of U.S. foreign trade and investment (remarks), 6309
 methods and objectives for attaining (remarks), 10122
 program, revised guidelines for banks and nonbank financial institutions, 4783
 prospects for 1967 (remarks), 237
 3d quarter, 1966, principal results (statement), 1657
 U.S., and private capital outflows (remarks), 1966
 U.S. spillover as it effects less developed countries (remarks), 13468
 U.S. travelers, you can assist, 11887
 United States position, observations by GAO, 17812
 use of reserved foreign currencies in lieu of dollars, law, 395
 voluntary agreements, safeguarding U.S. position, exemptions from antitrust laws, extend—
 law, 14906
 reports, 13647, 13674, 13811
 voluntary program for direct investments, status and prospects (remarks), 5964, 7585
 voluntary program, role of oil industry (remarks), 228
 Balance sheets, *see* Finance.
 Balanced Economic Development Commission, establish, hearings, 15156
 Balcerak, John C., predicting aerodynamic loads and dynamic response of rotor blades of tandem-rotor helicopter, 13310
 Balclutha, *see* Leafhoppers.
 Bald eagle, *see* Eagles.
 Baldwin, J. L., weekly weather and crop bulletin, national summary, 4046
 Baldwin, John F., memorial services, 5967
 Baldwin, Rey D., relief, 9256, 13560, 14893
 Baldy, Mount, sensitive area, Ariz., mineral resources, 8156
 Ball, Robert J., improved motility medium, 1737
 Ball-bearing retainers, materials in 60° R (33°K) hydrogen gas at 0.8 million DN value, film-transfer studies, 2709
 Ball bearings, *see* Bearings (machinery).
 Ball lightning, *see* Lightning.
 Ball mills, pulverizing lignite in ball mill, 15476
 Ballance, Richard C., fly ash as coagulant aid in water treatment, 2573
 Ballard, Robert F., Jr., structures instrumentation, Project Pre-Gondola, 17396
 Ballinger, Roy A.:
 markets for sweeteners, 4698
 noncaloric sweeteners, their position in sweetener industry, 10916
 Ballistic missiles, *see* Missiles.
 Ballistic ranges, ablating bodies in, thermal radiation studies, survey, 5234

Ballistics:
 ballistic limit of double-walled meteoroid bumper systems, 9893
 jet pluming effects on static stability of ballistic bodies at Mach number of 6.00, 2691
 test facility, for personal armor material, military standard, 9375
 trajectories, minimal energy, for missions to Mercury, 9886
 Balloons:
 ammonia as inflator, compatibility with fabrics, 4836
 moored, Federal aviation regulations, 10997
 motion, probing by Doppler radar, 16532
 passive geodetic satellite inflation rate study, 8426
 Project EOLE, satellite meteorological research, agreement with France, 2906
 radioactivity sampling of upper atmosphere, agreement with Australia, 5538
 sphere behavior and measurement of wind profiles, 11537
 unmanned free, Federal aviation regulations, 10997
 Balloons, *see* Elections.
 Balsam fir, *see* Fir.
 Balsam woolly aphids, *see* Aphids.
 Baltic Sea:
 lights and fog signals, list, change, 1539, 7905, 11645, 18101
 sailing directions change, 5328
 Baltimore, Md.:
 area wage survey, 8309
 port, 16525
 wholesale food distribution facilities, 5650
 Baltimore Methodist Board of Child Care, cost analysis study, 7231
 Baltrukonis, J. H., structural dynamics of solid propellant rocket motors, 2611
 Baltz, Elmer H.:
 ground-water resources of southern part of Jicarilla Apache Indian Reservation and adjacent areas, N. Mex., 17829
 stratigraphy, etc., of Upper Cretaceous and Tertiary rocks, east-central San Juan Basin, N. Mex., 16693
 Baluchistan melon fly, 8841
 Bands (music):
 District of Columbia Police Department band, include members of Fire Department, etc., report, 7687
 Marine Band, history, activities, etc., 9750
 Bangkok, Thailand, U.S. trade center, 12654
 Bangs disease, *see* Brucellosis.
 Banker, Dorothy C., mineral trade notes, monthly inventory, 3563
 Bankhead-Jones farm tenant act, *see* Agricultural credit.
 Banking, *see* Banks and banking.
 Banking and Currency Committee, House:
 calendar, 3472
 committee prints, 725, 4528, 7740, 12290-291, 13700-701, 15018
 hearings, 726, 9150-51, 1064-643, 12292, 15019-20, 16314-317, 17594-595
 investigations and studies—
 authorization, report, 7672
 development lending in Africa, etc., authorization, report, 7718
 expenses, reports, 7728-29
 proceedings, unveiling portrait of Wright Patman, 4465
 reports, 666-67, 690, 4497, 9137, 10597, 10602-603, 10607, 12284, 13634, 14945, 14961, 17572
 Banking and Currency Committee, Senate:
 activities, 89th Congress, 2d session, summary, 4633
 calendar, 3491
 committee prints, 4631, 4633, 6090-91, 9309, 10821, 17643

INDEX 1967

Banking and Currency Committee, Senate—
Continued
hearings, 4632, 6092, 7800-1, 9307-8,
10817-820, 10822, 12399-402, 13845-
849, 16150-152, 16396-397, 17641-642,
17644
investigations and studies—
authorization, reports, 4593, 4624
housing, Federal programs, etc., ex-
penses, reports, 4594, 4625
reports, 899, 4588, 4593-94, 6085, 9281-
83, 10765, 12360, 12388, 12391, 13796,
13812, 13816, 13822, 15095, 15132-
133, 16360, 16367, 16385-386
Bankruptcy:
act, amend rel. to—
administration of estates in superseding
proceedings—
hearing, 16420
report, 9095
bankruptcy courts determining dis-
chargeability and nondischargeability
of provable debts, hearing, 16420
creditor committee functions and ex-
penses—
hearing, 16420
report, 9093
filing of claims—
hearing, 16420
report, 9094
reallocation of part of filing fee, report,
16248
referees, hearing, 16420
legislation 1967, hearing, 16420
statistical tables, 5612
Banks, Nathan, caddis flies, types of species
described, 14542
Banks, Wayne G., who starts forest fires in
Maine—and how? 8076
Banks and banking:
agricultural financing, 12530
applications received, or acted on, by Fed-
eral Reserve System Board of Governors,
3035
assets and liabilities, all banks—
semiannual report, 7991, 16588
semi-monthly report, 3046
assets, liabilities, capital accounts, com-
mercial and mutual savings banks, 7958,
16567
automation and banking structure (re-
marks), 6297
bank credit and monetary developments,
8002
bank credit cards and check-credit plans,
development and implications (re-
marks), 14037
bank credit series, revision, 16595
bank debits, 2264
bank debits and deposit turnover, 3052
bank holding company act of 1956, tax
treatment of distributions pursuant to,
reports, 659, 7692, 15093
bank stock ownership and control, staff
report, 4528
print additional copies, report, 13654
banking and farm finance, present chal-
lenge (remarks), 6298
banking and monetary statistics, 14038
supplement, 2264
banking markets and interest rates, evi-
dence on concentration, 14040
central banking, initiative and innovation
in orchestration of monetary, fiscal and
debt management policies (remarks),
9493
certificates of deposit, reappraisal (re-
marks), 4784
changing image of banks and bankers (re-
marks), 16796
code of Federal regulations, 11033, 12522
commercial banks—
accounts and deposits, June 30, 1966,
national summary, 6247

Banks and banking—Continued
commercial banks—continued
commercial banks and interlocks among
financial institutions, control, staff
report, 15018
underwriting of municipal revenue
bonds, interest cost effects, 16592
condition report of large commercial banks,
weekly, 4055
consolidated condition statement, 3046
consumer installment credit, monthly re-
port, 3142
debts, demand deposits, and turnover
(periodical), 7998
debts to demand deposit accounts, etc.,
9489-92
Educational Opportunity Bank, establish-
ment, panel report, 15663
Federal reserve par list, 2258, 4782, 17762
cumulative supplements, 3316
Federal savings associations, establish
with conversion of State-chartered
banks, hearings, 15019
financial institutions and urban rehabilita-
tion (remarks), 16590
financial institutions supervisory act of
1966—
law, 409
reports, 666, 674, 691
foreign assets control regulations, com-
modity supplement, 8774, 17268
foreign government restraints on U.S. bank
operations abroad, economic policies and
practices, 9045
foreign operations under Federal reserve
act, regulations, 9495
insurance of savings accounts, questions
and answers, 16571
insured banks—
maximum rates of interest paid, regula-
tion, extend act—
hearings, 17595
law, 17541
report, 13816
offices insured by FDIC, list, supple-
ments, 3514
report, 1044
time deposits, temporary ceilings on in-
terest rates, report, 648
interest rates, savings competition, and
bank profitability (address), 11050
laws related to banking, compilation, 1985
mutual savings banks, Federal charter
legislation, hearings, 15019
nonmember banks that maintain clearing
accounts with Federal reserve banks,
list, 3895, 6305
operating banking offices, list, 14021
operating banks and branches, Dec. 31,
1965-Dec. 31, 1966 changes, 14020
participation loans with SBA, guide for
private lending institutions, handbook,
5490
prohibit certain financial institutions from
participating in gambling activities,
hearings, 12292, 16397
savings flows and public policy (remarks),
1067
time and saving deposits, changes, 11049,
14039, 16588
see also Federal home loan banks—Federal
intermediate credit banks—Federal
land banks—National banks—also head-
ings beginning Federal reserve—also
names of banks or places where located.
Banks Lake:
costs of operating and maintaining for
recreational purposes to be nonreim-
bursable, hearing, 7811
reservoir, costs of operating and main-
taining for recreational purposes to be
nonreimbursable, report, 6264
Bannister, Tommy C., Pegasus thermal
design, 1477
Banta, William C., new species of Victorella
from southern California, 9953

Baptists:
 illegal activities, USSR view, 1199
 workshop for Baptists on deafness and rehabilitation, University of Tennessee, 2968
 Barany, Ronald, heats of formation of lithium sulfate and 5 potassium- and lithium-aluminum silicates, 2577
 Barbados:
 background notes, 17213
 capsule facts for Armed Forces, 15921
 foreign trade regulations, 9019
 Barbed wire command, 14796
 Barber, Donald E., standards of performance for film badge services, 10047
 Barber, Marvin R., evaluation of handling qualities of 7 general-aviation aircraft, 1514
 Barcelona, Spain:
 U.S. Chamber of Commerce, 50th anniversary (remarks), 10468
 Spanish edition, 10464
 Barendsen, Robert D., education in Mao's China, 999
 Barger, Roland L., veneer volume and grade recovery from ponderosa pine in southwest, 14115
 Barges, ocean transport capability, container/barge quandry (paper), 12785
 Bareski, Albert M.:
 data report, Equalant III, 8569
 oceanographic vessels of the world, 8568
 Barbeau, Robert E.:
 method for treating PVT data from Burnett compressibility apparatus, 16863
 nonlinear regression and principle of least squares, evaluating constants and calculating variances and covariances, 6681
 thermodynamic properties of—
 fluids, etc., 9776
 van der Waals fluid in 2-phase region, 11379
 zero pressure thermodynamic properties of nitrogen gas, 6636
 Barite, bedded, in East Northumberland Canyon, Nye County, Nev., 10689
 Barium sulfate, from sea water, deposition in oil-well rotary pumps, 11386
 Bark beetles, see Beetles.
 Barnard, J. Laurens:
 bathyal and abyssal gammaridean Amphipoda of Cedros Trench, Baja, California, 17046
 benthic amphipoda of Monterey Bay, Calif., 275.
 Pacific Ampeliscidae, 6961
 Barnard, Paul G., effects of rare-earth additions on plain-carbon steel, 6686
 Barnes, D. K., genetic traits in tetraploid and diploid alfalfa, 8849
 Barnes, Donald J., effects of pulsed ionizing radiation on primate equilibrium function, 7354
 Barnes, Farrell F.:
 coal resources of—
 Alaska, 8157
 Cape Lisburne-Colville River region, Alaska, 15306
 Barnes, Harley, Cambrian and Precambrian rocks of Groom district, Nev., 14169
 Barnes, Harry H., Jr.:
 magnitude and frequency of floods in United States, South Atlantic slope and eastern Gulf of Mexico basins, Ogeechee River to Pearl River, 2374
 roughness characteristics of natural channels, 17833
 Barney, Alice Pike, memorial lending collection, catalog of paintings, 2747
 Barnoski, Richard L.:
 analog circuits for elastic structures, 5169
 dynamic characteristics of square plates by passive analog simulation, 5168
 maximum response of rectangular plates to random excitation, 16892

Barnoski, Richard L.—Continued
 maximum response of simple beams to random excitation, 14381
 Barns:
 calf barn, open front pen type, beliding plan, 41
 portable calf pens, farm building plan, 5659
 Barnwell, Richard W., numerical results for diffraction of normal shock wave by sphere and for subsequent transient flow, 17015
 Baroldi, Giorgio, coronary circulation in normal and pathologic heart, 11969
 Barometric pressure, see Atmospheric pressure.
 Baron carbide, whiskers, straight growth produced in radial furnace, 9836
 Barone, Demetria M., relief, 13612, 13771
 Baroni, Lilliana G., relief, 12325
 Baroreceptors, see Pressoreceptors.
 Barr, Joseph W.:
 remarks—
 Oct. 24, 1966, 1650
 Nov. 3, 1966, 2949
 Nov. 17, 1966, 2955
 Feb. 4, 1967, 5671
 Apr. 20, 1967, 10122
 May 11, 1967, 11884
 Sept. 21, 1967, 17265
 Oct. 4, 1967, 17269
 Oct. 19, 1967, 18245
 Oct. 20, 1967, 18242
 Barracks and quarters, troop housing, Navy design manual, changes, 2764
 Barracough, J. T., hydrology of National Reactor Testing Station, Idaho, 16890
 Barranger, John, magnetically soft, high-temperature cobalt-iron alloy, 1500
 Barrels, steel shipping, current industrial reports, 3169
 Barrett, Ashton C.:
 nomination, hearing, 15153
 remarks—
 Mar. 9, 1967, 7968
 Apr. 10, 1967, 7969
 Barrett, Curtiss C., orbit adjust and station keeping gravity-oriented satellites, 2688
 Barrett, James W., record of ponderosa pine seed flight, 1089
 Barrington, A. E., instantaneous monitoring of multicomponent expired gases, 2601
 Barrington, Alfred E., flyby measurements of profiles of water vapor, particulate matter, and carbon dioxide in Martian atmosphere, 15569
 Barrow, Alaska, topographic map, 4199
 Barry, Anthony J., stress distributions in burst-prone coal pillars, 12824
 Barry, John P., pulse coding for clutter suppression, 10018, 14596
 Bars (metal, etc.):
 Federal item identification guides for supply cataloging, supplements, 3288
 Bartek, Methodius J.:
 effect of oxygen on dog plasma sulfhydryl groups in vitro, 5712
 study of man in oxygen-helium atmosphere, selected blood enzyme response, 85
 Bartelt, Dean P., relief, 7629
 Barth, Joseph J., connector for saturated standard cells, 11590
 Bartholomew Bayou:
 and tributaries, engineer report—
 departmental edition, 2202
 document edition, 2003
 Barton, Manes, water supply outlook and Federal-State-private cooperative snow surveys for Nevada, 4048
 Barton, Richard L., parachute opening, 16984
 Barton, William R.:
 sand and gravel, 5133
 slag iron-blast-furnace, 2590
 stone, 5134

INDEX 1967

Bartosiewicz, John J., containers and packaging, quarterly industry report, 3147
 Bartz, Daniel J., use of adhesive labels for price-marking cases at grocery warehouses, 10155
 Basalt, aquifers, artificial recharge through well tapping, at The Dalles, Oreg., 16700
 Basel University, nuclear physics research activities, 5011
 Basements:
 home, fallout protection, evaluating techniques for improving, 5765
 making dry, 1668
 Basic Standards Institute, *see* Institute for Basic Standards
 Basora, Hilda, foreign trade regulations of Paraguay, 4446
 Bass, Richard L., relief, 7620, 10476, 10719
 Bass:
 striped—
 general information, 1076
 tagging summary, 8037
 Bassett, John R.:
 periodic cubic growth in natural loblolly stands near Crossett, Ark., 2324
 thinning loblolly pine from above and below, 8095
 Basutoland, *see* South Africa.
 Batavia, N.Y.:
 land transfer to—
 law, 12167
 reports, 703, 6004
 Bates, Jerry C., synthesis of 15 infrared horizon radiance profiles from meteorological data inputs, 9801
 Bates, Robert G., aeroradioactivity survey and areal geology of Pittsburgh area, 1779
 Bates, Roger G., Electrochemical Analysis Section, NBS, summary of activities, 18080
 Bathing units, field bath, facilities for troops, Army technical manual, 8885
 Batholiths, nature of, 6403
 Bathypelagic calanoid copepods of western Indian Ocean, 8548
 Bathyscaphes, French, departs for Japan, 9631
 Batteries, *see* Electric batteries—Storage batteries.
 Battery-powered vehicles, *see* Electric vehicles.
 Battle, Mark:
 addresses—
 Dec. 7, 1966, 2484
 Aug. 31, 1967, 17298
 Battle act, *see* Exports.
 Battle art, American Expeditionary Forces, 1918, exhibition, 8680
 Battle Mountain Indian Colony of Nevada:
 land in trust for cemetery—
 law, 14915
 reports, 13827, 14932
 Battlefields, *see* names of battles or battlefields.
 Battles, *see* names of battles, or places where fought.
 Bauer, Frederick L., industry wage survey, women's and misses' dresses, 6613
 Bauer, Helmut F., liquid sloshing in elastic containers, 16906
 Bauer, Mary L.:
 characteristics of persons with diabetes, 14638, 18189
 current estimates from health interview survey, United States, July 1965–June 1966, 11763
 Bauerschub, J. P., jr., nonmagnetic, explosive actuated indexing device, 11496
 Baum, Werner A., nomination, hearing, 6095
 Bauman, Allan, relief, 283
 Baumann, Lewis A., predicting quality of stored soybean oils, 15862
 Baumeister, Kenneth J., laminar flow analysis of film boiling from horizontal wire, 14456

Baumol, Wm., economic theory and operational research, book review, 14225
 Bauxite:
 deposits—
 Anniston, Fort Payne, and Ashville areas, northeast Alabama, 2356
 northeastern Alabama, 2357
 Rock Run and Goshen Valley areas, northeast Alabama, 9561
 southeastern United States (series), 2356–57, 9561
 ferruginous, Pacific Northwest, adaptation of Pederson process, 9788
 Hawaiian ferruginous, metallurgical testing, report, 11374
 ores, high-iron, processing, 9766
 report, quarterly, 3053
 reserves and potential resources of the world, 8154
 Bay of Bengal, *see* Bengal, Bay of.
 Bayard-Alpert ionization gages, *see* Ionization gages.
 Bayer 73, toxicity to fish, 16624
 Bayley, R. W., geology of Menominee Iron-bearing district, 6398
 Bayo, Francisco, United States population projections for OASDHI cost estimates, 8686
 Bayous, *see* names of bayous.
 Bazan, Juan R. Diaz Zayas, *see* Diaz Zayas Bazan, Juan R.
 BDSA, *see* Business and Defense Services Administration.
 Beach, Norman E.:
 directory in plastics, knowledgeable Government personnel, 2157
 glossary of plastic terms, consensus, 4680
 Beach erosion:
 and coastal processes, 10953
 projects, Federal reimbursement policy, study—
 departmental edition, 6209
 document edition, 6057
 see also names of localities.
 Beaches, fill and borrow area behavior, Sherwood Island State Park, Conn., 13976
 Beacons, non-directional, maintenance, FAA handbook, 6236
 Beagle, Edward G., jr., relief, 7638
 Beal, Raymond H., heavy pit moth attacks reduce early growth of loblolly and shortleaf pine, 14120
 Beam, Richard M., axially symmetric response of elastic cylindrical shell partially filled with liquid, 6907
 Beam splitters, *see* Beamsplitters.
 Beams:
 electron-bombardment ion-thruster, measurement of ion and electron densities, 5244
 glued-laminated, flexural behavior, 8104
 nonuniform multibranch, longitudinal and torsional vibrations, matrix analysis, 6886
 prestressed concrete, durability and behavior, investigation, 9424
 simple beams, maximum response to random excitation, 14381
 vibrating, with linearly varying axial load, upper and lower bounds for eigenvalues, 2609
 see also Electron beams.
 Beamsplitters, dielectric infrared, operating in 5 to 30 micron region, development, 6721
 Bean, B. R., world atlas of atmospheric radio refractivity, 4747
 Beans:
 dry, 8th research conference, report, 11920
 dry, good choice for thrifty family, food value, use, recipes, 9348
 Bear Canyon, primitive area, mineral resources, 8155
 Bear River Migratory Bird Refuge, mammals, list, 6354

- Bearden, J. A., X-ray wavelengths and X-ray atomic energy levels, 17036
- Beardsley, Wendell, cost implications of camper and campground characteristics in central Colorado, 14113
- Bearings (machinery):
 air, provides friction-free support for shaker system slip table, 8402
 ball bearings—
 design concept to decrease relative speed, 14421
 miniature, movement of oil in, factors affecting, 17089
 temperature limitations of ester, ether, and hydrocarbon base lubricants, 15576
 bearing torque and fatigue life studies with several lubricants, 11509
 composites of porous metal and solid lubricants increase bearing life, 6742
 Federal item identification guides for supply cataloging, supplements, 3285
 full-floating-ring bearings, 12849
 gas bearing components wear studies, 18003
 high-temperature bearing cage materials, evaluation, 5274
 hydrodynamic journal bearings, operation in sodium to 800° F. etc., 9901
 improved rolling element bearings provide low torque and small temperature rise in ultrahigh vacuum environment, 6835
 journal bearings in laminar and superlaminar flow regimes, steady-state and dynamic properties, 6803, 12849
 laminated elastomeric bearings in Uh-1 helicopter tail rotor, evaluation, 17389
 resilient bearing supports are gas controlled, 17975
 rolling element bearings, tester for study, 8448
 rotor-bearing systems, dynamic stability, 1439
 SAE 52100 steel hollow balls, rolling-element fatigue life, 6879
 superlaminar flow between nonconcentric rotating cylinders, 12852
 tilting-pad bearings, 9803
- Bears, *see* Polar bears.
- Beatty, Robert W.:
 errors in gain measurements in standard electromagnetic horns, 9944
 microwave attenuation, measurements and standards, 8523
- Beaty, Orren, Jr., nomination, hearing, 13883
- Beaud, Louis, relief, 12327
- Beaufort Inlet:
 to Bogue Inlet, N.C., hurricane survey, engineer report—
 departmental edition, 2203
 document edition, 1996
- Beaumont, Tex., area wage survey, 14294
- Beautification:
 aids for urban areas, as provided under housing and urban development act, 6415
 America's airport beautification awards program, 17741
 Greenspan plan for outdoor beauty, general information, 5672
 guard against plant pests for beautiful America, 1713
 guide to natural beauty, 11926
 help Lasse keep America beautiful (poster), 16648
 highway beautification act of 1965, review, hearings, 12311
 highway program, 1967, report on costs and economic impact, 6054
 print as S. doc., report, 4599
 highway program, 1968, authorizations—
 hearings, 15174
 reports, 15126, 16272
- Beautification—Continued
 nurserymen play important role in restoring beauty to the land (statement), 4142
 science and America's beauty, 15841
 State projects, public participation in highway beautification, 5477
 toward measuring intangible values of natural beauty (paper), 12461
 urban America, Federal beautification and open-space land programs, questions and answers, 4902
 USDA leadership for more beautiful countryside, 49
 Beautiful junk, 17709
- Beauty, Natural, Citizens' Advisory Committee on Recreation and, *see* Citizens' Advisory Committee on Recreation and Natural Beauty.
- Beauty, Natural, President's Council on Recreation and, *see* President's Council on Recreation and Natural Beauty.
- Beauty operators, so you want to be a cosmetologist, 15205
- Beaver Creek area, Ariz., soil survey report, 11803
- Beceiro, Daniel Pernas-, *see* Pernas-Beceiro, Daniel.
- Bechuanaland, *see* South Africa.
- Beck, W. J., Northwest Shellfish Sanitation Research Planning Conference, proceedings, 15683
- Becker, Eugene M., nomination, hearing, 15148
- Becker, Robert M., some anisotropic considerations in rock stress determinations, 12818
- Beckett, C. W., physics and chemistry, Journal of research, 3458
- Beckham County, Okla., Sandstone Creek watershed, hydrologic effects of small reservoirs, 2376
- Beckman, Norman, address, Sept. 11, 1967, 16707
- Becky, Jun., *see* Jun. Becky.
- Becoming a citizen series, 11211, 12630
- Red springs, *see* Redsprings.
- Bedding, current industrial reports, 7479
- Bedesem, M. P., internal Compton effect, 1430
- Bedrest, *see* Rest.
- Bedrock:
 geology of—
 Chepachet quadrangle, Providence County, R.I., 16685
 Shin Pond and Stacyville quadrangles, Penobscot County, Maine, 17825
 Island Falls quadrangle, Aroostook and Penobscot Counties, Maine, geological-geophysical investigations, 6401
 Beds, classification definitions, 18117
- Bedsprings, current industrial reports, 3169, 8941
- Bee, *see* Bees.
- Bee culture, beekeeping in United States, 13214
- Bee moths, greater wax moth, description, control, etc., 10169
- Bee Research Laboratory, Tucson, Ariz., research on honey bees, 10199
- Beef:
 good choice for thrifty family, food value, selection, recipes, 9344
 In family meals, guide for consumers, 5630
 slaughtering, cutting, and processing on farm, 4106
- Beef cattle, *see* Cattle.
- Beekeeping, *see* Bee culture.
- Beem, Arley L., relief, 7633
- Beer:
 excise tax exemption by IRS for certain consumers, GAO review, 9554

INDEX 1967

- Beer—Continued**
 imports into D.C., limit—
 hearings, 12294
 report, 14993
- Bees:**
 beekeeping in United States, 13214
 diseases, identifying in apiary, 5624
 honey bees—
 protecting from pesticides, 7275
 research, Bee Research Laboratory, Tucson, Ariz., 10199
 trap-nesting, life histories, etc., 8685
 beeswax, production, estimates by number of colonies of bees, yield per colony, etc., by States, 4150
 beet leafhopper, life history, host plants, and migrations in western U.S., 5686
- Beetles:**
 bark beetles—
 chemosterilants to control, tepa shows promise, 14108
 cylindrical screen cage for rearing, 14114
 distribution of attacks on ponderosa pine trees in Montana, 11115
 black turpentine beetle, general information, 16646
 click beetles of genus *Melanotus* in America north of Mexico (Coleoptera: Elateridae), revision, 8545
 elm bark, general information, 10172
 Euparixia genus, with description of new species from nests of leaf-cutting ants in Louisiana (Coleoptera: Scarabaeidae), review, 15606
 European chafer, blacklight traps development for surveys, 7303
 Glyptoscelsis genus, revision, 14533
 Haematichiton Gorham genus, review, 11608
 mountain pine beetle, description, control, etc., 17793
 Triplax Herbst genus, neotropical species, 11608
 western pine, forcing attacks to test resistance of pines, 8083
 Xyloterinus politus Say, defects in birch associated with, pictorial description, 4833
- Beets, table, growing, 4113**
- Behavior:**
 activity patterns of campers, 8071
 behavioral aspects of deafness, research, conference proceedings, 2967
 changes in rats at ground level following gestation and growth in 100% oxygen at reduced pressures, 15899
 chimpanzee, physiological analysis of so-called foresight, USSR study, 1306
 man in oxygen-helium atmosphere, 86
 man, 1967 behavioral model, his chains revealed, 14401
 privacy and behavioral research, 7107
 research, international, Federal support, hearings, 10842
 rodent ethology, with emphasis on evolution of social behavior, comparative study, 15603
 see also Conduct of life.
- Behavioral Science Research Laboratory,**
 technical research notes, 14804
- Behrendt, Donald R.,** influence of parent and daughter decay on tracer diffusion profiles, 14489
- Bekman, Helen M.,** Lincoln Creek formation, Grays Harbor basin, southwestern Washington, 12603
- Belrut agreement, see** Audio-visual equipment.
- Bekkedahl, Norman,** lecture, May 4, 1967, 9935
- Belanger, Roland,** shipyard scaffolding, 17888

- Belgium:**
 double taxation, convention, protocol, 2908
 establishing business in, 4435
 mineral industry, minerals yearbook chapter, 15467
 mutual defense assistance, agreement, 13148
 records of Dept. of State, microcopy, pamphlet to accompany—
 political relations with U.S., 18068
 relations with other states, 18069
- Belgrade, Yugoslavia, East of the Elbe,**
 study mission report, 6104
- Bell, Glennis L.,** relative legibility of Leroy and teletypewriter symbols, 64
- Belleville Locks and Dam, Ohio River,**
 navigation conditions, hydraulic model investigation, 1030
- Belliza, Josephine A.,** relief, 760
- Bellmard, Adel L.,** or heirs, relief, 610
- Bel lows:**
 fixture tests reliability through repetitive pressure/temperature cycling, 11448
 metal, and flexible hose, predicting frictional loss, method, 9825D
- Bells, see** Carillons.
- Belman, Albert A.,** wage chronology, International Paper Company, Southern Kraft Division, 8315
- Belorussian Soviet Socialist Republic:**
 Belorussian State University's Physics Department program, 18771
 medical research development, 12731
 programmed instruction, status, 1218
 Scientific Research Institute of Animal Husbandry, achievements in 50 years of Soviet power, 15421
 scientists and engineers, more needed to train specialists in microelectronics and bionics, 1271
- Belorussian State University, Physics Department program, 18771**
- Belorarskoye, Russian SFSR,** atomic electric power station Imeni I. V. Kurchatov, radiation situation in area, USSR study, 15406
- Belsterling, Charles A.,** fluidic systems design manual, 15955
- Belting, web belt load measuring instrument**
 has excellent stability, 14436
- Beltz, R. E.,** nucleic acids, annotated bibliography, 8534
- BEM pamphlets, 10419**
- Benach Carreras, Bienvenido,** relief, 271
- Bench, Nachman,** relief, 9233
- Bencome, Luis E.,** relief, 282, 586
- Bending moments, see** Moments.
- Bending of circular plates** confining incompressible liquid, 97
- Bending tests of 2 large-diameter corrugated cylinders with eccentric ring stiffeners,** 1506
- Bendura, Richard J.,** low subsonic static and dynamic stability characteristics of 2 blunt 120° cone configurations, 6893
- Benedict, John A.:**
 basic data on economy of—
 Ireland, 5955
 Portugal, 4443
- Benefit series service,** unemployment insurance report, 3055
- Benfer, Richard H.,** Project Pre-Schooner II, apparent-crater studies, 13342
- Bengal, Bay of,** sailing directions, 5329
- Bennet, O. L.,** boll, fiber, and spinning properties of cotton, as affected by management practices, 11945
- Bennett, Gae A.,** agricultural policies in Western Hemisphere, 17714
- Bennett, Gordon D.,** analysis of aquifer tests in Punjab region of West Pakistan, 11187
- Bennett, Harold J.,** iron and steel scrap in intermountain and northwestern Plains States, 16855

- Bennett, Robert L., address, Jan. 28, 1967, 15322
- Bennett, Wm. H., Texas leaf-cutting ant, 15278
- Benson, M. A., general field and office procedures for indirect discharge measurements, 11184
- Benson, Robert E., market trends for western white pine, 14089
- Benthic Polychaeta and Amphipoda of Morro Bay, Calif., 6956
- Benthos, benthic Amphipoda of Monterey Bay, Calif., 2751
- Bentley, N. M., claim, 7619
- Benton Lake National Wildlife Refuge, general information, 9519
- Bentonite, Umat, unusual montmorillonite, analysis, etc., 13291
- Benzene:
- benzenoid chemicals and products, imports, 17253
 - rings, infrared vibrations, in condensed thiophenes, 8377
- Benzenoid chemicals, *see* Benzene.
- Berber, John S., phthalic and maleic anhydrides from low-temperature lignite tar, 9768
- Berea sandstone, *see* Sandstone.
- Berg, A. L., discussion on cybernetics, 4975
- Berg, Dennis, W., groin design, 16321
- Berger, C., study of electrical analogue for electrodiagnosis, 9591
- Berger, Martin J., stopping power and range tables for protons, mesons, and electrons, 3192
- Bergmann, Barbara R., structural unemployment in United States, 7872
- Bergner, Per-Erik B.:
- compartments, pools, and spaces in medical physiology, symposium, 15959
 - ergodic properties of tracer system, 13337
 - turnover compartmentalization, statistical tracer theory for analysis of whole-system retention data, 12012
- Bering River and Valley, area, geomorphic effects of earthquake, 2370
- Berkeley, Cyril, polychaetes, type-specimens, descriptions, 5310
- Berkeley, Edith, polychaetes, type-specimens, descriptions, 5310
- Berkner, Lloyd V., address, Oct. 7, 1966, 5281
- Berkopeck, Frank D., performance of 2 subliming-solid-propellant thruster systems for attitude control of spacecraft, 6884
- Berkshire Hathaway Inc., wage chronology, 14297
- Berlin, Germany:
- East, study mission report, 7809
 - western—
 - economic statistics, handbook, 3388
 - establishing business in, 10458
- Bermuda, foreign trade regulations, 9017
- Bermudez, Marie del Carmen, relief, 316, 596, 818
- Bernardini, Albert T., effect of hypobaric and hyperbaric pressure on cell permeability, 7356
- Bernhard, R. K., stress and wave patterns in soils subjected to dynamic loads, 10255
- Bernhaut, Mildred R., scientific information notes, national and international developments, 3853
- Bernstein, Charles, relief, 850, 13778
- Bernstock, William M., bulletin of prosthetics research, 11889, 18246
- Bernzweig, Eli P., legal aspects of PHS medical care, 1582
- Berrier, Bobby L., isentropic plug nozzles, 6392
- Berries:
- bush, production, use, value, 1965-66, by States, 14695
 - frozen, U.S. standards for grades, 13897
 - see also* names of berries.
- Berry, Albert G., Jr., relief, 13576
- Berry, Jane, counselling girls and women, awareness, analysis, action, 13968
- Bersamin, Julietta G., relief, 290, 531
- Berson, Minnie P.:
- daily program for child development center, 15204
 - save them young, New York State's pre-kindergarten program, 13992
- Bertin, John J., test times and boundary layer induced property variations in circular shock tube, 5242
- Bertran, Raul E., relief, 10538, 13480, 13738
- Bertsch, Anthony A., defense materials system, 9608
- Beryllium:
- ages of plutonium-beryllium neutrons in tungsten-water media, 1502
 - apparatus for fabrication of americium-beryllium neutron sources prevents capsule contamination, 14366
 - fluorination, kinetics, 12925
 - substrate, film of beryllium fluoride protects against corrosion, 8459
- Beryllium fluorides, film protects beryllium against corrosion, 8459
- Beryllium oxide:
- crucible cast from, impervious to flux and molten metal, 5152
 - status of development of dispersed fuel particles in BeO matrix, 7421
- Beryllium sulfate, hydrates, low-temperature thermodynamic properties, 9777
- BES, *see* Employment Security Bureau.
- BES series, 6199-6200, 12471, 17727
- Bess, T. Dale, light-intensity data of Trail-blazer I reentry bodies, 2690
- Bessemmer process, digital computers for controlling, USSR study, 1253
- Besser, Jack M., hobby shops, 17194
- Beta particles, beta excited X-ray spectra, compilation, 6789
- Beta rays, absorptiometry with beta excited X-ray sources, 6770
- Bethard, Kimiko, relief, 797, 9221
- Bethlahmy, Nedavim, effect of exposure and logging on runoff and erosion, 9537
- Bethlehem, Pa., area wage survey, 11324
- Bethune, James E., performance of 2 slash pine varieties planted in south Florida, 9543
- Beverages, census of manufactures, industry report, supplement, 8933
- Bezates, Lambrini, *see* Bezates, Theodora.
- Bezates, Theodora, relief, 354
- BI series, 19, 5621, 8816-17, 13207
- BIA, *see* Indian Affairs Bureau.
- Bialek, Eugene L., handbook of oceanographic tables, 13024
- Bianchi, Eli E., relief, 13614, 13782, 14898
- Biaxial stress, *see* Strains and stresses.
- Biblioidae, *see* Flies.
- Bibliography:
- acclimatization versus tolerance to stress, 17863
 - aeronautics, 4169
 - aeronautics survey, 10207
 - aerospace medicine and biology, 1442, 2620, 5197-98, 6739, 8444-45, 11434, 12883, 14408, 15519, 16934-935
 - cumulative index, 8443
 - Africa, problems and prospects, 13296.
 - Africa, sub-Sahara, 17210
 - agriculture, 3056
 - Air Force Academy Library series, 5689, 10206-207
 - Air Force, 1960 scientific research, 7304
 - air pollution, 2805
 - aircraft noise and sonic boom, 4753
 - algal growth aqueous factors other than nitrogen and phosphorous, 6338
 - American agricultural books and periodicals, 14505
 - Antarctic bibliography, 6621
 - architecture, building and engineering, 13266

INDEX 1967

Bibliography—Continued
 arms control & disarmament (periodical), 3041
 Army and Air National Guard, civilian in peace, soldier in war, 5732
 artificial kidney (periodical), 11718
 Atlantic community, 15752
 audiovisual materials, sources, 7912
 bibliographic list, Federal Aviation Agency, 4753
 bioastronautics, USSR, 1243
 black oak, 14105
 blood chemistry of fishes, 17783
 brant, contribution toward, 16634
 brazing and brazing alloys, 2618, 8439
 California water resources, 1126
 carbon monoxide, with abstracts, 1589
 chemical and petroleum plants, investment and operating costs, 14328
 children who need protection, 1592
 children's books, 6622
 children's literature, 5085
 climate, Vietnam, Republic, 16539
 color defective vision, diagnostic tests, 17411
 communications satellites, 11433
 community planning for health, education, and welfare, 16540
 compressed air, diving and submarine medicine, 6628-29, 14314
 cooperation in agriculture, 1954-64, 1517
 cooperatives, general reading list, 12977
 crime and delinquency, International bibliography (periodical), 3163
 dairy marketing economics, 13950
 East Asia, 5526
 Eastern Europe and USSR, 15763
 education, 8866
 education of disadvantaged children, 4709
 elm spanworm, 2287
 external research paper, 7144
 family life and sex education, 6184
 farm management, etc., 7055
 ferrocene polymers, 2156
 fire performance of wood, 14081
 flame spectroscopy analytical applications, 1800-1966, 8519
 floriculture and ornamental horticulture, marketing and other economic information, 7885
 fluid amplifiers, 11400
 food chains, voluntary and cooperative, 10077
 food stores, 7112
 foreign countries, statistical publications, 3350
 forest conservation, 6363
 forest fires, Forest Service forest fire research staff, etc., publications, 8052
 Forest Service outdoor recreation research publications, 12568
 forest trees, genetics and breeding, 4827
 furniture retailing, 15732
 Government research and development reports, abstracts, etc., 3984
 Government-wide index, 3381
 grassland research, statistical methods, 10185
 guidance and counseling, 5689
 guide for professional reading for officers of Navy and Marine Corps, 17079
 hallucinogenic drugs, 14072
 hallucinogens, 12560
 hardware retailing, 7113
 high energy propellants, 11431
 Hispanic Foundation series, 12779
 historical data on hours and earnings, selected references, 8323
 hobby shops, 17194
 housing and community development, films, etc., 11204
 housing and planning references (periodical), 3402
 housing and urban planning, 4905
 hydroelectric power, pumped storage, 14707

Bibliography—Continued
 hydroelectric projects, Bratsk and Krasnolarsk, Central Siberia, USSR, 8665
 insect-vascular plant associational studies, 8804
 intelligence, 7338
 job printing shop, 15731
 labor-management relations, 11294
 labor management relations act, 1947, as amended by Labor-management reporting and disclosure act, 11599
 labor mobility, 15432
 lasers and masers, 14407
 Latin America, paperback books, 12779
 Liesegang rings, 15590
 low energy electron collision cross section data, 8521
 lubrication, corrosion and wear, 2621
 lunar surface studies, 11432
 management (excluding personnel), 10228
 Marine Corp historical bibliographies series, 14310
 marketing economics research publications, 13944
 marketing information guide, 3544
 marketing woody plants and related products, 1708
 mass spectroscopy, 15961, 17393
 medical reviews, 15597
 medical translations (periodical), 3057
 annual index, 14526
 mental health evaluation, 5421
 mental retardation, 4896
 mentally ill, community care, 1590
 methodological reports on census, 10382
 Mexican-Americans, 8282
 microwave and high-frequency, 17031
 military pyrotechnics series, engineering design handbook, 1750
 monetary theory and policy, domestic aspects, 8001
 MS-222, 8033
 national forests, 11710
 Navy training publications for advancement in rating, 11667
 neural sciences, translations, 17137
 New England regional economic research and planning, 7871
 nuclear energy for water desalting, 12014
 nuclear explosives, civil, industrial, and scientific uses, 5787
 nucleic acids, 8534
 nursing care of the aged, 10056
 nursing in coronary care units, 5452, 11754
 open space land planning and taxation, 12627
 PACAF basic bibliographies, 4169, 7338, 8866-67, 10227-230, 11950, 13266
 personnel literature, 3682
 personnel management and training, 10230
 pet shops, 17195
 phenylketonuria, 5906
 photography, 8567
 plastics, 981, 17702
 ponderosa pine, 17805
 price list, selective bibliography of Government research reports and translations, 1933
 professions, employment and training opportunities for women, 1669
 program analysis techniques, 1824
 psychology, 10206, 11950
 public health series, 1589-90, 7083, 8642-43, 11753-754, 13090, 15705
 radioactive waste processing and disposal, 5786
 radiobiology, 13343
 radioisotopes—
 biological sciences, 10304
 experiments in high school biology, 5797
 techniques for instruction in biological sciences, 8910
 radionuclide standardization, 15682
 Randall Jarrell materials in collections of Library of Congress, 12780
 Reclamation Bureau, 8665

Bibliography—Continued

- red-tide, 9520
 refuse collection and disposal, 8642, 11753
 regional economic development, resource materials, 4684
 religion and mental health, 11719
 research and development, congressional concern, 4641
 retail operating costs and ratios, 5493
 retail store advertising, 5494
 Ryukyu Islands, 10267
 science facilities, literature related to planning, design, and construction, 14561
 second breakdown in semiconductor devices, 18082
 small business, 1600, 2856, 5493-95, 7112-13, 10077, 15731-732, 17194
 recordkeeping systems, store and service trade, 2856
 smoking and health, 15705
 snow, ice, and frozen ground, 14791
 social security, 7124
 soil and water conservation, 8806
 south Asia, 11832
 southeast Asia, 13141
 space exploration, PACAF basic bibliographies, supplement, 10227
 spinal cord injury, supplement, 5585
 stimulants and depressants, 14073
 store location, 1600
 supplementary compensation, selected references, 5082
 swimming pools and natural bathing places, 13096
 technical translations (periodical), 3933
 temperature measurement, 11584
 training retail salespeople, 5495
 tree nut production and marketing research, 13233
 unemployment program, 1951-66 research studies, 6200
 urban affairs, selected readings, 8200
 urban public transportation, 2385
 vacuum and low-pressure measurements, supplement, 12984
 Vietnam, 15805
 vigilance, human and animal, 9753
 vocational education, 9414
 walnut and related species, 8108
 water for peace, 10439, 14872
 WB/BC series, 16539
 weather modification, 1944-66, in Soviet Union, 17903
 women workers: mature, 5597
 Wood, Robert C., published works, 6416, 11195
 wood finishing, 14082
 wood preservation, 14083
 writing, 17130
see also names of departments, etc., issuing lists of publications.
- Bicarbonates, *see* Carbonates.
 Bickart, Charles M., relief, 790, 12332, 16124, 16167
 Bickford, W. J., signal processor employing synthetic phase isolator, 11397
 Bidding, *see* Government contracts.
 Biderman, Albert D., District of Columbia study on victimization and attitudes toward law enforcement, 13058
 Biedermann, Konrad, layout, equipment, and work methods for school lunch kitchens and serving lines, 4121
 Bieniewski, Carl L., mineral industry of Colorado, 8345
 Bienstock, Daniel, process development in removing sulfur dioxide from hot flue gases, etc., 12831
 Bifano, William J., solar direct-energy conversion systems operating between 1.0 and 0.1 astronomical unit, 6856
 Big game, *see* Game and game birds.
 Big job ahead, 8663
 Big Sandy Creek and Valley, Lincoln, Cheyenne, and Kiowa Counties, Colo., geology and ground-water resources, 11191
 Big Snowy group, *see* Mississippian period.
 Bigcone Douglas-fir, *see* Fir.
 Biggs, Archie A., fireplaces and chimneys, 8825
 Big Horn Canyon National Recreation Area, establish, law, 383
 Bikerman, J. J., foam fractionation of inorganic solutions, 12642
 Bilello, Michael A., Arctic and subarctic temperature inversions, 4200
 Bilezikjian, V., parametric analysis and preliminary design of shaft-driven rotor system for heavy-lift helicopter, 116
 Bilingual Children, Advisory Committee on Education of, *see* Education of Bilingual Children Advisory Committee.
 Biller, James C.:
 housing and urban development notes, 3403
 urban renewal notes, 4010
 Billings, Mont., Federal-aid Interstate highway frontage road, justification, Public Roads Bureau, GAO review, 2348
 Billingsley, C. H., sampling tool to extract cores from baled hay or straw for analysis, 13291
 Bills (congressional):
 Agriculture Committee hearings on miscellaneous bills, 709
 armed services, hearings on miscellaneous bills, 717-718, 720, 723, 942, 2043-44, 2108, 4524, 4526, 10637, 10639, 13696-697, 16311-312, 17593
 digest, 3206
 history, 8132
 Biloxi, Miss.:
 harbor modification, engineers report—departmental edition, 4730
 document edition, 4474
 Binary diffusion, *see* Diffusion.
 Bindery workers, examination announcement, amdt., 204
 Bindweed, field, control method, 14749
 Bingham, George C., catalog, paintings, exhibition, 18084
 Bingham, R. T., economical and reliable estimates of general combining ability for blister rust resistance obtained with mixed-pollen crosses, 9536
 Binocular vision:
 acuity of adults, by region and selected demographic characteristics, United States, 13099
 pilot considerations, effect of age on fusion time, 4253
 Bins, potato storage, 20,000 cwt, arched roof, 13230
 Bioassay, *see* Biological assay.
 Bioastronautics, bibliography, USSR, 1243
 Biochemistry:
 and Soviet Minsk-2 computer, Bulgarian study, 4947
 behavioral model of man, 1967, his chains revealed, 14401
 biochemical basis of movement of cilia and flagella, structural organization, USSR study, 12696
 biochemical procedures, 7414
 inflight biochemical responses utilizing parotid fluid collection technique, determination, 4187
 nervous system, 4th all-Union conference, 1336
 protein nutrition, USSR book review, 15405
 radiation, role of Bulgarian scientists, 1159
 Soviet research on biochemistry of brain and muscles, 14214
 viruses, USSR study, 15364
 Biochemists, examination announcement, amendment, 17453
 Bioengineering, research and manpower, national workshop proceedings, 15703

INDEX 1967

Biography:

- Academy of Sciences, Latvian SSR, members, 1163
- members of President's Committee on Mental Retardation, 5407
- men and milestones in American agriculture, 2039
- NASA astronauts, space flight team, 11423
- State Department biographic register, 14670
- USSR scientists, 1330
- women of 90th Congress, 14728
- see also* subjects of biographical sketches.
- Biologic fluids, *see* Body fluids.
- Biological assay:
 - laboratories, labor-saving devices, 16624
 - meeting, Oct. 7-8, 1965, Albuquerque, N. Mex., proceedings, 5766
- Biological chemistry, *see* Biochemistry.
- Biological Laboratory, Galveston, Tex., report, 17773
- Biological Laboratory, Gulf Breeze, Fla., annual report, 14055
- Biological Laboratory, St. Petersburg Beach Fla., contribution, 12545
- Biological physics:
 - Moscow Naturalist Society, Biophysical Section, activity, 4971
 - scuba diving, biologic and physical aspects, 11953
- Biological products:
 - biological products produced and destroyed in licensed establishments, list, 5619, 15832
 - biological samples, pesticide residues, cleanup, etc., 13200
 - regulations, Public Health Service, 11720
- Biological sciences, *see* Biology.
- Biological Sciences Department, Hungarian Academy of Sciences, secretarial report, 1269
- Biological warfare:
 - antibacteriological defense and decontamination of naval vessels, USSR study, 8248
 - bacteriological weapons and how to defend against them, USSR study, 15412
 - biological weapon, indication, USSR study, 6574
 - decontamination with hypochlorite, 10012
 - defense, Army field manual, 1758
 - field CBR collective protection, Army technical manual, 5740
- Biologists:
 - examination announcement, 14856
 - discontinuance notice, 16077
 - fishery, examination announcement, discontinuance notice, 16077
 - wildlife, examination announcement, discontinuance notice, 16077
- Biology:
 - aerospace—
 - bibliography, 1442, 2620, 5197-98, 6739, 8444-45, 11434, 12883, 14408, 15519, 16934-935
 - cumulative index, 8443
 - protons and space travel, 1731
 - agricultural/biological vocabulary—
 - alphabetical list, 17026
 - categorized list, 17025
 - associate training programs, NIH, 5420
 - bases for compiling biological program to study productivity of fresh-water complexes outlined, USSR study, 5008
 - biological catalysts models, USSR study, 14239
 - biological data, tropical Atlantic Ocean, Equalant III, report, 8569
 - biological effectiveness of various types of radiations, USSR study, 5032
 - biological effects of—
 - ionizing radiation, bibliography, indexes, 13343
 - radiation, 5434
 - ultrasound, USSR study, 11268

Biology—Continued

- biological field investigative data for water pollution surveys, 1073
- biological macromolecules study, light scattering method, Rumania, 14234
- biological oceanography of eastern tropical Pacific, 8033
- biological sciences—
 - national program of research (address), 15835
 - radioisotopes, annotated bibliography, 10804
- biological systems, ionic transport, model membrane studies, 6443
- Bredin-Archbold-Smithsonian biological survey of Dominica, 5316, 6962
- control sciences applied, USSR studies, 1322
- dwarf mistletoe parasitizing true fir in California, 5685
- electronics application, USSR research, 4970
- freeze-dry preservation of biological specimens, 6950
- high school, radioisotope experiments, bibliography, 5797
- International Biological Program—
 - support of Congress, etc., hearings, 17612
- USSR plans, 15380
- molecular aspects of biological development, 6711
- new era, USSR comment, 9621
- program, AEC authorizing legislation, 1968, hearings, 10491
- problems of biological productivity of terrestrial plant communities, USSR conference, 4968
- radiation transport and biological effects, special sessions, proceedings, 13314
- radioisotope techniques for instruction in biological sciences, 8910
- research—
 - recent developments, Rumania, 9671
 - reports from Priroda, 16778
- samples taken during orbital flight, storage problems, 9820
- simulation, USSR study, 15356
- thermodynamic equilibrium in prebiological atmosphere, etc., 11426
- USSR—
 - biological problems studied by Vityaz research vessel, 11269
 - biological sciences, better coordination of research and practice urged, 6500
 - translations, 14271
- see also* Germ-free life—Marine biology—Photobiology—Radiobiology—Space biology.
- Biomagnetism, considerations relevant to manned space flight, 16911
- Biomedicine:
 - biomedical application teams, space application, etc., 15495
 - biomedical monitoring during dynamic stress testing—
 - Flack test, 7360
 - instrumentation and normal values, 7343
 - Levy hypoxia test, 7344
 - maximum exercise tolerance, ergometer, 7361
 - tilt table orthostatic tolerance test, 7362
- Communist Chinese abstracts, 3115
- East European abstracts, 3217
- research in service of man, biomedical knowledge, etc., conference proceedings, 17617, 17654
- scientists, elections to Academy of Sciences, USSR, 1331

Biomedicine—Continued
translations, bibliography (periodical), 3057
USSR abstracts, 4025
Biometry:
notes on biometry in medical research, 17284
repeated measurements on experimental units in 2-way classification, analysis, 7348
Bionics:
and control systems, USSR study, 1323
bionics and reliability, USSR study, 11251
contemporary problems and their philosophical significance, USSR studies, 1337
more Belorussian scientists and engineers needed to train specialists, 1271
odors, measurement and control, bionic aspects, USSR study, 9652
second all-Union conference, 1220
Soviet research, reports, 1259
USSR research and personnel training, 16773
Biophysics, *see* Biological physics.
Biosynthesis, controlled biosynthesis, USSR study, 11263
Bio-thermal responses to varied work programs in men kept thermally neutral by water cooled clothing, 8423
Bipolar current driver for memory circuits, 2627
Birch:
defects associated with injuries made by *Xyloterinus politus* Say, pictorial description, 4833
paper and yellow birch, germination and growth in simulated strip cuttings, 4849
Birch Creek, travertine depositing stream, Inyo County, Calif., physical and chemical description, 8171
Bird, Kermit, speech, June 20-22, 1966, 12458
Birds:
Anahuac National Wildlife Refuge, list, 11085
Aransas National Wildlife Refuge, list, 4504
birds and aircraft on Midway Islands, 1959-63 investigations, 4809
birds in our lives, announcement and order form, 1565
breeding bird survey, 12550
Cape Romain National Wildlife Refuge, list, 17777
Cross Creeks National Wildlife Refuge, list, 8020
Delta National Wildlife Refuge, list 17781
Florida Keys national wildlife refuges, list, 17780
Imperial National Wildlife Refuge, list, 12547
Klamath Basin national wildlife refuges, list, 15262
Loxahatchee National Wildlife Refuge, list, 11080
McNary National Wildlife Refuge, list, 11081
Mark Twain National Wildlife Refuge, list, 11083
Modoc National Wildlife Refuge, list, 11082
protected by Federal law, list, 11091
Navall National Wildlife Refuge, list, 11084
role of depressor mandibulae muscle in kinesia of avian skull, 11610
St. Marks National Wildlife Refuge, list, 11079
Santa Ana National Wildlife Refuge, list, 17779
Seedskadee National Wildlife Refuge, list, 11086
Seney National Wildlife Refuge, list, 17778

Birds—Continued
Tamarac National Wildlife Refuge, list, 15264
Waubesa National Wildlife Refuge, list, 15263
see also Water birds.
Birefringence, sprayable birefringent coating enables strain measurements on large surfaces, 2680
Birmingham, Ala., area wage survey, 14286
Birnbau, Abraham H., interpretation of vertical and oblique photographs, 5750
Birth:
and fetal death registration, hospital handbook, 11737
natality statistics analysis, 8662
natality, vital statistics of U.S., 15716
records, where to write, 11765
registration, physicians' handbook, 13088
Birth control:
family planning—
community action for health, 2167
programs in developing countries, 8227
report, 1136
Bis(2-guanidoethyl) disulfide, mechanism of action of AET, protection of DNA against ionizing radiation by GED, 5713
Bismuth:
disposal from national and supplemental stockpiles, report, 14938
mineral industry survey, quarterly, 3059
Bisplinghoff, Raymond L., address, Sept. 2, 1966, 5280
Bitter Lake National Wildlife Refuge, geological mineral resources, 17821
Bitter root, apples, general information, 17320
Bitterbrush, measuring seed production on plants with variable crown density, 11122
Bituminous coal, *see* Coal—Coal mines and mining.
Bjork, K. L., impact effects as applied to meteoroid hazards, 12855
Bjugstad, A. J., cattle in woods or woods in pasture, 14093
Black, Cyril E., neutralization in southeast Asia, 2116
Black, David S., nomination, hearing, 15161
Black, Donald J., crime and law enforcement in major metropolitan areas, 13060
Black, Dorothy J.:
base data on economy of South Viet-Nam, 7577
foreign trade regulations of Malaysia, 13458
Black, Ralph J., refuse collection and disposal, 8642, 11753
Black, William R., heavier loading of watermelons in rail cars and piggyback trailers, 10154
Black Bayou:
engineers report—
departmental edition, 15224
document edition, 14930
Black body, *see* Blackbody.
Black cherry, *see* Cherry.
Black Hills, southern geology and uranium deposits (series), 12597, 14163
Black locust, *see* Locust trees.
Black oak, *see* Oak.
Black Parizan site, archeology, 5499
Black Sea, lights and fog signals, list, change, 1538, 5333, 11643, 18100
Black turpentine beetles, *see* Beetles.
Black walnut, *see* Walnuts.
Blackberries:
erect and trailing diseases, description, control, etc., 1651
growing, 14740
Blackbirds, protecting corn from blackbirds, methods, 16337
Blackboards, slate, standard sizes, standard of trade, 5285
Blackbody, modified device emits high-density radiation, 17995
Blackburn, Benjamin B., contested election, report, 12271

INDEX 1967

- Blackburn, Maurice, biological oceanography of eastern tropical Pacific, 8038
 Blackbutt eucalyptus, *see* Eucalyptus.
 Blackiston, Slaton C. Jr., relief, 13588
 Blackleg, cattle blackleg, cause, control, etc., 14748
 Blacklight traps, *see* Insect traps.
 Blade, O. C.:
 aviation turbine fuels, 9762
 burner fuel oils, 16860
 diesel fuel oils, 1966, 2568
 motor gasolines—
 summer, 2569
 winter, 12811
 Blades:
 blade-element performance of 2-stage axial-flow pump with tandem-row inlet stage, 11513
 rotor, tandem-rotor helicopter, aerodynamic loads and dynamic response, predicting, 13310
 self-locking, supports work platform, 12906
 transient blade motions of rotor with flapping and lead-lag degrees of freedom, numerical method for studying, 17010
 turbine blade loading, advanced concepts to increase, experimental investigation, 12850
 turbine blade root design concept promises superior alignment, 6782
 working blade-rings of turbines, etc., friction and leakage losses, 5277
 Blaha, Bernard J., technique for verifying structural integrity of full-scale segments of launch vehicles at transonic speeds, 6906
 Blake, Doris H., revision of beetles of genus *Glyptoscelis*, 14533
 Blake, Henry E., Jr., Pederson process adaptation to ferruginous bauxites of Pacific Northwest, 9788
 Blake, Wilson, stresses and displacements surrounding open pit in gravity loaded rock, 14350
 Blackley, Earl R., soil survey, Hall County, Tex., 14655
 Blank, H. Richard, Jr., geologic interpretation of aeromagnetic survey of Iron Springs district, Utah, 11173
 Blankenship, Ben, agricultural situation, 3002
 Blankenship, Charles P., extrusion of $\frac{1}{2}$ - and $\frac{3}{4}$ -inch-diameter, thin-wall tungsten tubing using floating-mandrel technique, 5250
 Blankenship, Martha, relief, 835, 13729, 16166, 17491
 Blast, protection with in-tank valve shutoff, 2645
 Blast furnaces:
 industry manpower survey, 17729
 iron, developing thermochemical model, measurement of rate coefficient for reduction of iron ore pellets in packed bed, 17915
 iron, thermochemical reduction zone, developing mathematical model, 14334
 natural gas injection and oxygen-enriched blast operation, 12828
 pressure drop across fixed beds of anthracite briquets and blast furnace materials, 11375
 see also Slag.
 Blasting:
 grit blasting nozzle fabricated from mild tool steel, satisfactory performance, 6762
 presplitting rock cuts, controlled technique, 5476
 see also Explosives.
 Bleaching:
 effect, in ZnS(Co) crystals under influence of ruby laser pulses, 9926
 patent classification definitions, 5369
 wood, 15282
 Blenniidæ, *see* Entomacrodus.
 Blew, J. Oscar, Jr.:
 comparison of wood preservatives in—
 Mississippi, post study, 1967 progress report, 11110
 stake tests, 15281
 preservative treatment of fence posts and farm timbers, 10165
 Blind:
 aid to the blind and OASDI recipients, comparison between beneficiaries and nonbeneficiaries, 11799
 computer programmer, translator program converts computer printout into Braille language, 11441
 District of Columbia register, establish, report, 16382
 new life for blind, vocational rehabilitation, 17184
 new vistas for the blind, 2378
 public assistance money payments to recipients, 4751
 salaries for selected occupations in services for blind, 2499
 State agencies, directory, 7220
 statistical data on blindness, USSR, 2470
 Blinded Veterans' Association, legislative program, hearings, 9172
 Blindness:
 flashblindness—
 experiment in F-4C flight simulator, 1738
 F-106B aircraft experiment, 17349
 Blindness Statistics, Model Reporting Area, *see* Model Reporting Area for Blindness Statistics.
 Bliss, J. C., tactual perception, 6706
 Blister rust:
 growth rate and survival probability of blister rust cankers on sugar pine branches, 14103
 resistance obtained with mixed-pollen crosses, economical and reliable estimates of general combining ability, 9536
 see also Sweetfern blister rust.
 Blocker, H. Derrick, classification of Western Hemisphere *Balcutha* (Homoptera: Cicadellidae), 8547
 Blocks:
 concrete—
 incinerator, building plan, 4124
 industry, work injuries and accident causes, 16813
 wave tests of revetment using machine-produced interlocking blocks, 16519
 Blomstrom, Mitsuo, relief, 15069, 16206, 17510
 Blood:
 anticoagulation therapy, laboratory control, 17358
 artificial, circulation in cats, systemic vascular reactions, USSR study, 11287
 blood chemistry of fishes, bibliography, 17783
 carbon dioxide content, electrochemical technique for measuring, 10243
 cardiac output, etc., of unanesthetized swine, 4186
 carotid and femoral artery blood flow in hyperthermic cats, 5710
 cells, airman who apply insecticides from aircraft may suffer ill-defined effects, 17410
 cells, permeability, effect of hypobaric and hyperbaric pressure, initial observations, 7356
 chemistry, *Macaca mulatta* monkey, normal values, 7368
 clotting studies in submarine crew, serial analysis of clotting mechanism during prolonged submergence, 12790
 coagulation mechanism, effects of monomethylhydrazine, 17361
 coronary circulation in normal and pathologic heart, 11999
 enzyme response on man in oxygen-helium atmosphere, 85

Blood—Continued

- erythrocytes changes in rats trained to hypoxia, USSR study, 4985
- fibrinolytic and postmortem tissues, procurement and utilization, 11289
- fibrinolytic mechanism in-vivo inactivation of antihemophilic globulin by hydrazine, 14771
- glucose concentration, affects the effects of hydrazine on fat transport, 65
- Hematological Service of USSR and immediate tasks confronting it, 6584
- hemophilic, anticoagulant effect, clotting prolonged in canine transmitter, 10244
- hemostasis and coagulation, 7340
- influence of long-term lower body negative pressure on circulatory function of man during prolonged bed rest, 1734
- mathematical methods in interpreting and evaluating proteinogram and their practical significance, USSR study, 12694
- mean blood hematocrit of adults, 10069
- oxygen saturation determined by transmission spectrophotometry of hemolyzed blood samples, 16936
- plasma—
 - dogs, effect of oxygen on sulfhydryl groups, 5712
 - effects of ionizing radiation on concentration of amino compounds, 5714
 - volume response to tilting, effects of bed rest and water immersion, 7345
- preservation, tasks and problems, USSR study, 1229
- renal flow, effect of hydrazine, preliminary study, 11967
- Rh factor, 2817
- sodium and water excretion and renal hemodynamics during lower body negative, 14770
- see also Gamma globulin.
- Blood banks, laboratory procedures in blood banking, Army technical manual, 5745
- Blood pressure:
 - hypertension and heart disease, 3 views, 8658
 - Intra-aortic and auscultatory, comparison of simultaneous measurements with pressure-flow dynamics during rest and exercise, 4254
 - monitoring device, automatic indirect, design, etc., 73
 - renal disease and hypertension, Public Health Service cooperative studies, conferences, proceedings, 17160
- Blood transfusion, see Blood.
- Blood vessels, artificial parts, fact sheet, 11729
- see also Arteries.
- Bloodletting, history, synopsis, 12442
- Bloomfield, Lincoln P., arms control and limited war in developing areas, 15924
- Bloomington, Calif., ground water, patterns of subsurface flow, 1118
- Blowdown, high speed system, provides rapid pressure loss, 8468
- Blowers:
 - current industrial reports, 3170, 12070
 - industrial plant equipment handbook, 4674
- Blowtorches, welding torch and wire feed manipulator, 17993
- BLS, see Labor Statistics Bureau.
- BLS report series, 2492-95, 5054-55, 8300, 11309, 12768, 14282, 15437, 16812-813, 17890-891
- Blue collar workers, examination announcement, 12102
- see also Government officials and employees.
- Blue Cross, see Health Insurance.
- Blue Mountains:
 - Oregon and Washington, defect estimation for grand fir, Engelmann spruce, Douglas-fir and western larch, 2289

Blue Mountains—Continued

- summer range, fluctuations in forage quality, 10665
- Blue Ridge, ground water, 9566
- Blue Ridge Parkway:
 - extension, report, 16243
 - general information, 13002
- Blue Shield, see Health Insurance.
- Blue tongue, sheep, incidence, 13
- Blueberries, dehydrated explosion puffed, new method for preparing, description, 7249
- Bluestem:
 - Flint Hills and Osage pasture report, Kansas and Oklahoma, 14692
 - range, common plants of longleaf pine, 2334
- Blum, Barton M., accuracy of mean-growth estimates made with dial-gage dendrometers, 8079
- Blunt bodies:
 - local flow properties and drag coefficients, 18056
 - spherically blunted cones—
 - aerodynamic characteristics at Mach 20, 14488
 - with base flares, aerodynamic characteristics, 1486
 - supersonic gas flow around blunt bodies, 12974
- Blutt, J. R., gravity independent vapor absorption refrigerator, 14385
- Bluth, James E.:
 - pulpwood production and consumption in north central region by county, 2337
 - rising pulpwood prices stimulate largest Lake States pulpwood harvest, 14101
- Board of Education of District of Columbia, see District of Columbia.
- Board of Regents of Smithsonian Institution, see Smithsonian Institution.
- Board of Trustees of Federal Hospital Insurance Trust Fund, annual report, 7601
- Board of Trustees of Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds, annual report, 10504
- Board of Trustees of Federal Supplementary Medical Insurance Trust Fund, annual report, 9056
- Boards of education, see Educational boards and departments.
- Boards of Review, Judge Advocates General, court-martial reports, holdings and decisions, 4671
- Boating:
 - accident reporting, rules and regulations, 9007
 - laws and regulations, safety, etc., 220
 - private pleasure, in national forests of Minnesota, 8068
 - recreational, official Coast Guard guide, 219, 4419
 - recreational, safety, hearing, 17603
 - statistics, motorboat numbering, boating accidents and related activities, 9000
- Boats:
 - boat landing, building plan, 39
 - official Coast Guard recreational boating guide, 219, 4419
- Boatswain's mate:
 - 1&C. Navy training course, supplement, 13025
 - 3 & 2. Navy training course, supplement, 13025
 - see also Aviation boatswain's mate.
- Bobb, C. Donald, static stability investigation of sounding-rocket vehicle at Mach numbers from 1.50 to 4.63, 12934
- Bodies (aerodynamics), see Aerodynamics.
- Bodies of revolution:
 - ablating bodies in ballistic range, thermal radiation studies, survey, 5234
 - paraboloidal shells of revolution, differential equations of axisymmetric vibration, 17946

INDEX 1967

Bodies of revolution—Continued
pointed slender, turbulent-boundary layer characteristics at supersonic speeds, 18026
shells of revolution possessing variable thickness heat protection, stiffness matrix solution, 11514
Body (human), *see* Anatomy.
Body composition:
adult men, 14780
changes, during acute starvation, metabolic aspects, 7412
effects of diet and altitude on body compartments of rats, 10295
military population, Ft. Carson, 1963, body density, fat, and potassium 40, 120
urinary creatinine excretion as index of fat-free mass composition in rats, 7415
Body fluids:
effects of diet and altitude on body compartments of rats, 10295
measurement of trace levels of deuterium oxide in biologic fluids using infrared spectrophotometry, 11984
microanalysis, automatic, apparatus for, 2646
Body temperature:
achievement of thermal balance and its maintenance during environmental stress, 1822
temperature-sensing telemetry system for rhesus monkeys, 17360
Body volume of adult men, 14780
Body weight, food and your weight, 14744
Boe, Kenneth N., sound wood residue left after experimental cuttings in old-growth redwood, 14106
Boehler, Gabriel D., investigation of lightweight structural design techniques for lightweight fans, 117
Boehm, Charles F.:
addresses, etc.—
May 24, 1967, 10456
May 25, 1967, 10455
Sept. 8, 1967, 16098
Boehmmites, microfibrinous, bonded with molybdenum disulfide, use as dry-film lubricants, 10001
Boettcher, Arnold J., ground-water development in High Plains of Colorado, 4893
Boeuf Bayou:
engineers report—
departmental edition, 15224
document edition, 14930
Bogdanoff, John L., atlas of off-road ground roughness P.S.D.'s, 4195
Boggs, Howard L., guide for preliminary design of arch dams, 5479
Bogue Inlet:
to Moore Inlet, N.C., hurricane survey, engineer report—
departmental edition, 2204
document edition, 1997
Bohannan, Billy:
effect of size on bending strength of wood members, 1094
flexural behavior of large glued-laminated beams, 8104
Bohlin method, *see* Mathematics.
Bohr-van Leeuwen theorem, *see* Equations.
Bollers:
construction, material and strength properties of components, results of ultrasonic testing in practice, 13339
forced-flow, single-tube boiler—
frequency response, 12952
with inserts, frequency response, 18022
Industrial, industrial plant equipment handbook, 977
instabilities due to coupling feed system and subcooled region, 9917
power, steel, current industrial reports, 4341, 13395

Boiling:
characteristics of wicks, vapor-chamber fin studies, 14379
convection boiling inside channels, study, 7430-31
film boiling from horizontal wire, laminar flow analysis, 14456
film-boiling heat transfer from flat plate, effect of subcooling and radiation, 14453
fluid properties and gravity level, effects on boiling in discrete bubble region, 15562
heat transfer, and bubble mechanics, in zero-gravity environment, 5164
water, in single-tube heat exchanger, pressure drop and heat transfer, 14463
see also Nucleate boiling.
Boiling water reactors, *see* Reactors (atomic).
Boise, Idaho:
area wage survey, 17897
vicinity, tributaries of Boise River, flood control, etc., engineer report—
departmental edition, 10959
document edition, 10497
Boise River and Valley:
tributaries, flood control, etc., engineer report—
departmental edition, 10959
document edition, 10497
Boldman, Donald R., heat transfer, in convergence nozzles, with uncooled pipe inlets, 17005
Boldt, Robert F., generating random information for experimental decision problems, 4225
Boles, Patrick P., wholesale distribution facilities for Huntington, W. Va., 4
Boling, Jewell, counselor's handbook, 7922
Bolivia:
agricultural commodities, agreement, 8723, 11838
mineral industry, minerals yearbook chapter, 12798
records of Dept. of State, microcopy pamphlet to accompany, internal affairs, 18063
Boll, fiber, and spinning properties of cotton, as affected by management practices, 11945
Boll weevils, *see* Weevils.
Bollen, W. B., primary microbiological succession on landslide of Alpine origin at Mount Rainier, 11119
Boller, J. R.:
random-scan display of predicted satellite positions, 9994
use of NTDS as satellite display, 14593
Boller, K. H., horizontal machine for testing structural wood elements in tension, 8062
Bollworms:
aerial dispersal in U.S. and Mexico, 5978
corn earworm in sweet corn, control, 14747
large-scale field evaluation of electric insect traps to reduce bollworm populations in Reeves County, Tex., 11915
moths, ultrasonic speaker for studies of acoustic sensitivity, 4083
pink, method of evaluating cotton gins for kill, 10147
spiny bollworm, new plant pest, 8840
Bolsenga, S. J.:
Great Lakes snow depth probability charts and tables, 12776
total atmospheric water vapor aloft over Great Lakes basin, 16833
Bolshevism, *see* Communism.
Bolts and nuts:
cable clamp bolt fixture facilitates assembly in close quarters, 15533
mixed bolts, nondestructive test method accurately sorts, 2679
pneumatic wrench retains or discharges nuts or bolts as desired, 6701
single wrench separates nuts from free-floating bolts, 14363

- Bolts and nuts—Continued
stress distribution near explosively expanded rock bolt anchors, 5126
Bolt, Henry, Dam and Reservoir, *see* Henry Bolt Dam and Reservoir.
Bombardment, high-purity single-crystal silicon with protons, 11534
Bombay Hook National Wildlife Refuge, general information, 4803
Bombers, *see* Airplanes.
Bombing airplanes, *see* Airplanes.
Bond, Deborah T., State labor legislation in 1966, 5052
Bond, J. A., vaporization of high-temperature potassium, 14391
Bonding, performance and payment bonds on ship construction contracts, Maritime Administration policy, etc., GAO review, 2350
Bonding of materials:
 brazing alloy holds bonding strength over wide temperature range, 5207
 dry-film lubricants from molybdenum disulfide bonded with microfibrous boehmite, 10001
 heat transfer and ultrasonic transmission properties, correlation established, 8389
 oxides of high temperature alloys, 10016
 refractory metals by vapor deposition, 14432
 silver plating ensures reliable bonding of dissimilar metals, 11461
 ultrasonic quality inspection of bonded honeycomb assemblies is automated, 2664
 vibrations of hollow elastic cylinder bonded to thin casing of different material, 18048
Bonds:
 municipal revenue. Interest cost effects of commercial bank underwriting, 16592
 open market money rates and bond prices, monthly, 3855
 purchase plans. Income tax, laws and regulations, 9596
 sales for public school purposes, 6176
 see also Bail—Savings bonds.
Bonds of United States, *see* Government securities—Savings bonds.
Boner, F. C., floods of June 1964 in northwestern Montana, 15314
Bones:
 cancer, health information, 17147
 preparation, preservation, and use in plastic surgery of joints, USSR study, 15347
 see also Skeletons.
Bong Oh Kim, relief, 10725
Bonin, Joseph M., economic effects of seasonality in OASDIH tax payments, 17203
Bonner, F. T., responses of 1-year-old cottonwood to increasing soil moisture tension, 14122
Bonneville, Lake, Weber Delta district, geology and hydrology, 6400
Bonneville Dam, fish passage report, 13974
Bonneville Power Administration:
 advance program, 12026
 anniversary of act, take official note, report, 15097
 appropriations, 1967, law, 403
 appropriations, 1968—
 hearings, 12287, 16393
 report, 13678
 generation and sales statistics, 7448, 15982
 programs, briefing session, hearings, 10655
Bonura, M. S., engineering criteria for spacecraft cabin, atmosphere selection, 16912
BONUS power station, *see* Nuclear reactor power plants.
Bonus system, code of Federal regulations, 11043
Book lists, *see* Books.
Book stores, *see* Stores.
Bookbinders, examination announcement, amdt., 204
Bookcases, wood, executive office, Federal standard, cancellation, 6307
Booker T. Washington National Monument, general information, 8552
Bookkeeping, organization at Lugansk locomotive-building plant, USSR study, 1293
Bookmobiles, from buttermilk to gum log, serving Arkansas River Valley families, 12466
Books:
 American agricultural, in print, selected list, 14505
 catalog of copyright entries, 12432, 16451
 children's, 1966, list, 6622
 Federal item identification guides for supply cataloging, supplements, 3292
 historic, concerning general agriculture in collection of National Agricultural Library, 8515
 housing and urban planning, 4905
 Library of Congress—
 author catalog, 1393, 3601
 register of additional locations, 16838
 subject catalog, 2529, 3505
 National Library of Medicine, 16th century imprints, 15598
 see also Children's literature—Textbooks.
Bookstores, *see* Stores.
Booms:
 DeHavilland stem, damping behavior, 11539
 gravity gradient, thermal bending plus twist of thin-walled cylinder of open section, application, 15561
Boone, R. Sidney, paintability of 2 Hawaii-grown woods, 4843
Boone, W. H., nuclear power sources, 7756
Booster reactors, *see* Reactors (atomic).
Boosters (rocket), *see* Rockets.
Boots and shoes:
 footwear, new developments (talk), 4703
 footwear, production by manufacturer's selling price, current industrial reports, 5861
 general repair, technical manual, 13302
 jet shoes, extravehicular space locomotion device, 8483
 shoe industry, opportunities for increasing markets and employment, 2161
 shoes and slippers, current industrial reports, 3169, 8947
Born, dispersion in plastic, excellent fire-retardant heat insulator, 8384
Border Patrol, Immigration and Naturalization Service:
 immigration patrol inspector, careers, examination announcement, 10435
 origin and work, 15319
Boreholes, deformation methods, deep mine stress determinations, 6676
Boreighting (radio), *see* Antennas.
Borg-Warner Corporation, adjustment assistance case pertaining to certain workers, excerpts from Tariff Commission report to Automotive Agreement Adjustment Assistance Board, 7205, 17257
Borges Caignet, Alfredo, relief, 12344
Boring insects, *see* names of insects.
Boris Kldric Institute, spatial distribution of reactor radiation around horizontal channel of RA reactor at Vinca, Yugoslavian study, 6479
Bormuth, W. D., production of manufactured dairy products, 14699
Born, J. David, specific gravity of increment cores from Interior Alaska trees, 4835
Born approximation, comparison of Gryzinski and Born cross sections for metastable 2s state of atomic hydrogen, 9874
Borneo, western and northeast coasts and off-lying islands, sailing directions, change, 5330

INDEX 1967

- Boron, amorphous boron powder recovery and purification, and crystallization purification of boron from residues and scrap, 12017
- Boron carbide, aluminum-titanium hydride-boron carbide composite provides lightweight neutron shield material, 16878
- Boron hydrides, toxicology, 7357
- Borrowing, *see* Loans.
- Borum, Rodney L.:
addresses, etc.—
May 11, 1967, 10333
May 22, 1967, 10334
June 22, 1967, 10327
- Bosch, Myriam, relief, 273
- Bosque del Apache National Wildlife Refuge: general information, 8027
geology and mineral resources, 17821
- Boss, R. E., design review for space systems, 14405
- Boet, William E., combined subject and author indexes to radiobiology, bibliographies, 13343
- Bostock, D. J., tabular line-of-balance production control technique, 7433
- Boston, Mass.:
area wage survey, 5069
plant relocation and core city worker, 16711
- Boswell, Victor R.:
commercial growing of carrots, 11932
growing table beets, 4113
rhubarb production, outdoors and in, 10174
- Botanic Garden:
appropriations, 1968, legislative—
law, 13537
reports, 10617, 13813
- Botanical gardens, Ukrainian, research gains noted, 14235
- Bothnia, Gulf of, lights and fog signals, list, change, 1539, 7005 11645, 18101
- Botrytis rot of bell peppers, 34
- Botswana:
background notes, 5520
continued application of certain treaties concluded between United States and United Kingdom, agreement, 11839
- Bottles, plastic, current industrial reports, 3169
- Boulard, Heber D., locating, designing, and building country grain elevators, 1683
- Boulay, Emilie, relief, 257, 803
- Boulder, Colo., laboratories, general information, 16097
see also National Center for Atmospheric Research.
- Boulder County, Colo., geology of Eldorado Springs quadrangle, 11165
- Bouma, D. D., multivariable analysis of mechanics of penetration of high speed particles, 6708
- Boundaries:
international boundary studies, 1630-33, 2883, 8718, 11829, 17224-225
studies—
Burundi-Rwanda, 1632
Burundi-Tanzania, 1630
Cambodia-Thailand, 2883
Chad-Niger, 1633
Czechoslovakia-U.S.S.R., 17225
Finland-USSR, 8718
Hungary-U.S.S.R., 17224
Israel-Lebanon armistice line, 11829
Kenya-Tanzania, 1631
- Boundary layer:
attached and separated at Mach 13.8, on highly cooled, ablating and nonablating models, 12954
boundary-reflected-disturbance lengths, determination in Langley 16-ft. transonic tunnel, 16991
control, blowing over flaps, investigation over moving ground plane of transport model, 14477
- Boundary layer—Continued
edge loadings, effect on vibration of rectangular plates with various boundary conditions, errata, 12919
laminar separations using Crocco-Lees mixing parameter, analytic method, investigations, 9806
measurements in accelerated flows near Mach 1, 8497
nitrogen injection, effects on graphite surface in high-temperature dissociated airflow, 12964
plane-stress analysis of plate subjected to boundary loads, boundary displacements, etc., 16895
plasma boundary interactions, 15512
stagnation-point, with suction and injection in equilibrium dissociating air, 8499
test times and boundary layer induced property variations in shock tube, 5242
transition on cooled 7.5° total-angle cone at Mach 10, 18021
- turbulent—
characteristics of pointed slender bodies of revolution at supersonic speeds, 18026
heat-transfer measurements on flat plate with attached protuberances, 5232
investigation at Mach 6 with heat transfer at high Reynolds numbers, 8488
pressure distribution on oscillating panels in low supersonic flow, 6718
skin friction, effects of periodic blowing through flush transverse slots on, 1431
skin friction on 5 swept wings, wake momentum surveys, measurement, 2725
- Boundary value problems:
asymptotic behavior of solutions of boundary problems for quasilinear differential equations, 11573
nonlinear, modified quasilinearization, concept for solving, 12941
- Bourne, Charles T., training device developments, 18115
- Boutin, Henri P., relief, 796, 9222
- Bovine tuberculosis, *see* Tuberculosis in animals.
- Bowen, A. J., budget of littoral sands in vicinity of Point Arguello, Calif., 7924
- Bowen, Paul H., solid lubricants for helicopter transmissions, 8897
- Bower, David R., surface soil recovers quickly after burn, 8097
- Bower, Edward C., permit to serve as director of Virgin Islands National Bank prior to obtaining U.S. citizenship, 252, 782, 4497
- Bowers, Robert C., status of research on lubricants, friction and wear, 17082
- Bowes, John X., Santa Clara County Welfare Department, San Jose, Calif., intake and case recording, fact-finding report, 10973
- Bowie County, Tex.:
explosion in ordnance plant, settlement of claims—
law, 12158
reports, 637, 801
- Bowles, Gladys K., potential supply and replacement of rural males of labor force age, 1721
- Bowman, Earl K., bulk handling spring crop potatoes from harvester to packing line, methods and costs, 35
- Bowman, T. E., liquid settling and interface dynamics, 2608
- Bowman, Thomas E.:
new crustaceans, Sphaeronellopsis monothrix, etc., 15605
pelagic amphipod Cyphocaris challengerii in northeast Pacific, 6967
- Box Cars, roller-system to facilitate covering with tarpaulins for fumigation, 13202
- Box tree, growing boxwoods, 5632

- Boxcars, *see* Box cars.
- Boxelder bugs, general information, 17795
- Boxes, fiber, solid, Federal standard, 6312
- Boxwoods, *see* Box tree.
- Boy Scouts of America:
- amateur radio stations, permit operation by participants in 1967 world jamboree—
 - law, 13538
 - reports, 12368, 13665
 - annual report, 9065
 - world jamboree, 6-cent air mail postal card (poster), 13052
- Boyd, Alan S.:
- nomination, hearing, 9310
 - remarks, Nov. 29, 1966, 1950
- Boyd, Majorie E., quantum mechanical calculations of 2d virial coefficients for hydrogen, 8527
- Boyle, J. C., measurement of extremely feeble torques on massive bodies, 2696
- Boyle, James R., mineral industry of Tennessee, 6666
- Boynton, John H., manned 3-pass orbital mission, Mercury-Atlas 7, spacecraft 18, description, etc., 6865
- Brabb, Earl E., stratigraphy of Cambrian and Ordovician rocks of eastcentral Alaska, 6404
- Brabbs, Theodore A., recombination of carbon monoxide and atomic oxygen at high temperatures, 2718
- Brachlopods:
- Middle Ordovician, from basin ranges, western U.S., 11174
 - silicified Middle Ordovician, from Kentucky, 16697
- Brackett, Jean C., city worker's family budget for moderate living standard, 17894
- Brackish water, *see* Water.
- Bradford, E. W., defense industry bulletin, 3193
- Bradley, Gene E., thousand partnerships, 4722
- Bradley, Johnny R., and others relief, 296, 565, 813
- Bradley, Nell B., disabling work-injury experience of oil industry and natural gas industry in U.S., 16851
- Brady, George A., dewatering anthracite slurry, 15478
- Braham, Randolph L., Israel, modern education system, 6187
- Braille system, *see* Blind.
- Brain:
- biochemistry, Soviet research, 14214
 - cerebral air embolism, basic studies, 12703
 - composition and function studied by Soviet scientists, 8271, 9610
 - diseases effects on recognition capacities studies by engineers for use in computer development, USSR study, 6488
- human—
- spectral characteristics of water-soluble protein fraction, USSR study, 12707
 - tumor cells, DNA content, cytospectrophotometric research, USSR study, 12757
- neuron differentiation in different parts of rabbit brain, USSR cytochemical study, 14221
- neuronal structure and synapses in brain stem and spinal cord, characteristics and significance in carnivores, USSR study, 12711
- rats, nitrogen metabolism under impulse accelerations, USSR study, 1167
- research, Veterans Administration, 8783
- sciences, translations, 1950-60, bibliography, 17137
- tumor cells, morphology, using anoptral microscope, USSR study, 12739
- tumor, uranyl phthalocyanines show promise in treatment of, 12842
- Brain drain, *see* Immigration and emigration.
- Brainard, Robert W., catalog technique for measuring image quality, 7406
- Braithwaite, John G., passive infrared acquisition and tracking system analysis, 5177
- Brakes:
- braking mechanism is self actuating and bidirectional, 2629
 - emergency escape system uses self-braking mechanism on fixed cable, 5223
 - friction, cushions acceleration and vibration loads, 6771
 - hydraulic service systems for automotive vehicles, Federal standard, 6321
- Bram, Ralph A., classification of Culex subgenus Culex in New World, 6953
- Bramante, A. Donald, market factors in Spain, 13459
- Branchiobdellidae, *see* Annelids.
- Brandll, Henry W., natural environment of satellite in synchronous circular orbit, 15883
- Brannigan, R. A., electricity, transmission to vehicles, classification definitions, 18131
- Brant, bibliography, contribution toward, 16634
- Brantley, F. E.:
- iron ore, 5106, 6641
 - iron oxide pigments, 1399
- Brashears, A. D., cotton stripper for harvesting research plots, 3
- Brass:
- millis, scrap and metal consumption and stocks, mineral industry survey, monthly, 3062
 - scrap consumers, mineral industry survey, monthly, 3151
- Brassieres, current industrial reports, 14825
- Bratsk, Russian SFSR, hydroelectric projects, bibliography, 8665
- Braun, Harold, relief, 857
- Brayton cycle:
- high-performance radial-flow gas generator, design and fabrication, 8409
 - internally and externally finned radiators, in space, exploratory study, 8405
 - solar-Brayton system turboalternator, parasitic-load speed control, analog-computer study, 5258
 - turboalternator, static parasitic speed controller, 17004
 - two-spool solar-Brayton system turboalternator, valve-speed control, 5257
- Braze joint quality tested electromagnetically, 16964
- Brazil:
- agricultural commodities, agreement, 5547
 - atomic energy, cooperation for civil uses, agreement, 7167
 - background notes, 7139, 13132
 - Commission for Educational Exchange and financing of exchange programs, agreement, 11837
 - cotton, trends and prospects, 9525
 - defense equipment and materiel, disposition, agreement, 11854
 - foreign trade regulations, 17479
 - income tax convention—
 - hearing, 17651
 - text, etc., 9185
 - income tax legislation, 12133
 - labor law and practice, 11309
 - loan of vessels, agreements, 15788, 15798
 - mineral industry, minerals yearbook chapter, 16857
 - position in world agricultural trade, 17713
 - special study mission, report, 10568
- Brazing, *see* Solder and soldering.
- Bread:
- price study, report, 4521
 - prices, economic report, 4539
 - whole grain or enriched, good choice for thrifty family, food value, use, recipes, 9342

INDEX 1967

Breakfasts:

- eat a good breakfast to start a good day, 14745
- school breakfast program for children—closing nutrition gap, 15871
- law, 373
- report, 663
- Breaking sound barriers, 5378
- Breakiron, Philip L., reducing transport damage in top-iced shipments of fresh vegetables in bushel baskets, 5646
- Breakwaters:
 - Burns Waterway Harbor, Ind., stability, hydraulic model investigation, 7933
 - engineering and design manual, 12475
- Breathing, *see* Respiration.
- Breathing apparatus, self-contained for measuring carbon dioxide in inspired air, machine-test method, 1413
- Breckenridge, F. C., colors of signal lights, selection, definition, measurement, production, and use, 8522
- Bredahl, R. M., reserve marine, 3828
- Bredin-Archbold-Smithsonian biological survey of Dominica, 11612, 14540
- Breeze, R. C., design, fabrication, and feasibility testing of prototype airborne respiration analyzer, 8425
- Breidenbach, A. W., identification and measurement of chlorinated hydrocarbon pesticides in surface waters, 4800
- Bremer County, Iowa, soil survey report, 18213
- Bremsstrahlung radiation:
 - angular distribution of thick-target bremsstrahlung which includes multiple electron scatterings, 14466
 - calculations, plane isotropic buildup factors, 15565
 - electron scattering and bremsstrahlung cross-section measurements, 9811
 - electron temperature determination from X-ray continuum radiation emitted from high temperature plasmas, 11681
- Brendel, M., coordinates, use in numerical theory of satellites, 11545
- Brendemeuhl, R. H., loss of topsoil slows slash pine seedling growth in Florida sandhills, 14119
- Brennan, Robert, chemical quality of ground water, 4893
- Brenner, Edward J.:
 - addresses, etc.—
 - Aug. 6, 1966, 2789
 - Dec. 30, 1966, 5872
 - May 16, 1967, 10020
 - May 31, 1967, 11685
 - June 7, 1967, 11689
 - Aug. 5, 1967, 14601
- Brenner, F. Cecil, lecture, Mar. 31, 1967, 9946
- Brenza, Arthur D., method of analyzing dynamic data characterized by time-varying frequency spectrum, 16996
- Brest Civil Engineering Institute, general information, 5029
- Brewe, David E., film-transfer studies of 7 ball-bearing retainer materials in 60°R (33°K) hydrogen gas at 0.8 million DN value, 2709
- Brewer, William D., effect of thermocouple wire size and configuration on internal temperature measurements in charring ablator, 6864
- Brewerville, Liberia, housing, potential savings through constructing rather than leasing, USIA, GAO report, 6379
- Brezhnev, Leonid I., speech, Apr. 24, 1967, 9317
- Bricker, Lee A., effect of -7Gz acceleration on renal excretion of solutes in rabbits, 14776
- Brickman, William W., Denmark's educational system and problems, 9397
- Brickmason, *see* Masons.

Bricks:

- concrete, industry, work injuries and accident causes, 16813
- wood-brick tile for panelling, 14133
- Bridge circuits, *see* Circuits.
- Bridge cranes, *see* Cranes, derricks, etc.
- Bridge engineers, opportunities in Public Roads Bureau, 1593
- Bridge to your success, opportunities for young engineers in Public Roads Bureau, 18192
- Bridgeport Museum of Art, Science, and Industry, *see* Museum of Art, Science, and Industry, Bridgeport, Conn.
- Bridges, Benjamin, Jr.:
 - imputed income from owner-occupied housing, 7129
 - net worth of aged, 17200
- Bridges, International bridge act of 1967, report, 9272
- see also* Bailey bridges—also names of bridges, or bodies of water to be bridged.
- Bridwell, Lowell K.:
 - nomination hearing, 6126
- remarks—
 - Oct. 19, 1966, 238
 - Nov. 3, 1966, 1953
 - Nov. 18, 1966, 1952
- Brief cases, current industrial reports, 3169
- Briefs of accidents, U.S. civil aviation (periodical), 7518, 13014
- Briefs of accidents, U.S. general aviation, small fixed-wing aircraft, etc. (periodical), 3063
- Bridgen, Wayne H., miniaturized double-focusing mass spectrometer, 2589
- Briggs, George E., team training, 18109
- Bright, William E., soil survey of Tippah County, Miss., 1612
- Brilhart, G. L., power plants, classification definitions, 18121
- Brill, Daniel H., role of financial intermediaries in U.S. capital markets, 6303
- Brimmer, Andrew F.:
 - addresses, etc.—
 - Nov. 18, 1966, 1065
 - Nov. 19, 1966, 2265
 - Feb. 16, 1967, 6300
 - Mar. 21, 1967, 7999
 - Apr. 14, 1967, 8000
 - Apr. 21, 1967, 9493
 - May 17, 1967, 11056
 - June 8, 1967, 11050
 - June 9, 1967, 11053
 - Aug. 3, 1967, 14037
 - Aug. 23, 1967, 15249
 - Sept. 22, 1967, 16590
- Brines:
 - desulfation processing of Great Salt Lake brines, studies, 6688
 - disposal costs, Texas, procedures and methods for calculating, 12645
 - oilfield, bromide and iodide content, in some Tertiary and Cretaceous formations in Mississippi and Alabama, 11385
 - waste from desalination plants, utilization, feasibility study, 14196-197
- Brinkerhoff, Joris M., analysis of selected samples by microwave spectroscopy for trace contaminants collected from space simulator, 5711
- Brinkman, Kenneth A., stand volume equations for shortleaf pine in Missouri, 14094
- Brinkman, Robert E., selected bibliography of unemployment insurance program, 1951-66 research studies, 6200
- Briquets, anthracite, pressure drop across fixed beds, comparison with blast furnace materials, 11375
- Briscoe, C. B.:
 - effects of pruning teak, 12576
 - weather in Luquillo Mountains of Puerto Rico, 14130

- Bristol, R. I.:
harbor, engineer report—
departmental edition, 17730
document edition, 17570
- Bristol County, Mass., Taunton quadrangle,
geology, 9560
- British Columbia:
ferries, use for Alaska-bound cargo, hear-
ing, 13851
sailing directions, change, 18018
- British Commonwealth, *see* Great Britain.
- British Guiana, *see* Guyana.
- British Honduras, mineral industry, min-
erals yearbook chapter, 14331
- British Isles, *see* Great Britain.
- British Solomon Islands, *see* Solomon
Islands.
- Britt, Clarence S., soil and water conserva-
tion research in northeastern States, 38
- Broadcasting, *see* Radio broadcasting—
Radio stations—Television.
- Broadfoot, W. M., 5 years of nitrogen fer-
tilization in sweetgum-oak stand, 2321
- Broadwater County, Mont., geology and
igneous petrology, 2367
- Broccoli, caterpillar control in South, 15847
- Broder, D. L., problems in reactor shielding
physics, 12972
- Brodman, Catherine M., establishing business
in France, 4431
- Brodsky, Gerald L., cancer chemotherapy
abstracts, 3075
- Brogan, Francis A., electronic stethoscope
for aircraft use, 11966
- Broilers, *see* Chickens—Poultry.
- Brokaw, Leland D., development of bench-
mark scales for Air Force officer position
evaluation, 5795
- Brokers, mailing list, require registration
with Postmaster General, hearing, 10667
- Brombacher, W. G.:
bibliography and index on vacuum and
low pressure measurement, 12984
ionization vacuum gauges and their per-
formance characteristics, 5290
- Bromfield, Calvin S., geology of Mount
Wilson quadrangle, western San Juan
Mountains, Colo., 15304
- Bromides, content in oilfield brines in some
Tertiary and Cretaceous formations in
Mississippi and Alabama, 11385
see also Methyl bromides.
- Bronchitis:
chronic—
cigarette smoking effects, 5424
rehabilitation manual, 14619
- Brooding chicks with infrared lamps, 15857
- Brook trout, *see* Trout.
- Brooklyn Center, Minn.:
relief—
law, 14912
report, 10609
- Brooks, David R., computerized data-reduc-
tion technique for Langmuir probe of
electron temperature variations in exhaust
of magnetoplasmadynamic arc, 78047
- Brooks, Edward M., meteorology of Mars
and Venus, 11410
- Brooks, Frank P., gastroenterology abstracts
and citation, 3372
- Brooks, Mary T., relief, 9250, 13500, 13562
- Brosge, William P., geology of Umiat-Maybe
Creek region, Alaska, 8159
- Brother Amable, *see* Beaud, Louis.
- Brotherhood of Railroad Trainmen, emer-
gency board report, 13966
- Brotherhood Week, *see* National Brotherhood
Week.
- Broussard, Florence, chronology of events
related to Federal legislation for oceanog-
raphy, 4550
- Brower, R., scientific photography, 4235
- Brown, Ann M., participation of hospitals
in pilot study of hospital discharge sur-
vey, 2842
- Brown, Albert E., minimum fuel ascent from
lunar surface, 16994
- Brown, Bertha W., apparent consumption of
industrial explosives and blasting agents
in United States, 15463
- Brown, Emma E., abstracts of U.S. APRO
research publications, 7405
- Brown, Gerald A., nomination, hearing, 4651
- Brown, J., Army CREEL topographic map,
Barrow, Alaska, 4199
- Brown, James K., forest floor fuels in red
and jack pine stands, 2303
- Brown, Lester R., Jr., mineral industry of
Chile, 12799
- Brown, Lionel A., Pony Creek archeology,
15734
- Brown, Myrtle I., nursing care of the aged,
annotated bibliography, 10056
- Brown, R. A., sodium arsenate possible erad-
icant of fusiform rust infections, 12581
- Brown, R. R., space radiation equivalence for
effects on transistors, 14380
- Brown, Richmond F., hydrology of cavernous
limestones of Mammoth Cave area, Ky.,
1132
- Brown, Robert D., Jr., Parkfield-Chrolame,
Calif. earthquakes, 9574
- Brown, Sidney E., demand for flowers-by-
wire, 10179
- Brown, Stephen C.:
mineral industry of—
Belgium, 15467
Greece, 15468
Luxembourg, 6656
Netherlands, 11362
Switzerland, 8367
minerals in world economy, 15471
- Brown, Stuart C., analysis of bypass air
control system for supersonic mixed-com-
pression inlet, 12946
- Brown, Tillis H., Jr., population crisis, hear-
ings, index, 16416
- Brown County, Tex., Fusulinidae from
Graford formation and Winchell limestone,
Canyon group, Upper Pennsylvanian,
12615
- Brown spot, variation in infection of longleaf
pine from several geographic sources,
14118
- Brown Swiss cattle, *see* Cattle.
- Brownian movements, application to statisti-
cal mechanics and to quantum communi-
cation theory, 8597
- Browning, J. Louis, strengthening community
services in low-income neighborhoods, field
guide to concerted services, 17840
- Browns Park National Wildlife Refuge, gen-
eral information, 15265
- Brownsville, Tex.:
candidate insecticides and acaricides eval-
uated, 13196
land purchase by Agriculture Dept.—
hearings, 16303
law, 16143
reports, 13668, 16370
- Browse, *see* Forage plants.
- Bruce, M. Melvin, analysis of first-order
polynomial predictor for data compression,
8491
- Bruce, Robert A., North Atlantic trawl nets,
15256
- Brucellosis:
bovine, eradication in cooperation with
States, summary, 3915
- eradication—
activities in cooperation with States,
summary, 3919
cooperative State-Federal program—
progress report, 15830
statistical tables, 11
national committee, 1967 proceedings,
15830
- Brumberg, Abraham, problems of commu-
nism, 3771

INDEX 1967

- Brungs, William A., jr., distribution of cobalt 60, zinc 65, strontium 85, and cesium 137 in freshwater ponds, 15681
- Brush:
- brushfield reclamation, reforestation with ponderosa pine, 4844
 - conversion, soil slippage increased, 11120
 - herbicides fail to insure success of brushfield prescribed burn, 6366
- Brushes:
- electrical contact, Federal Item Identification guide for supply cataloging, 6148
 - Federal Item Identification guides for supply cataloging, supplements, 3290
 - grading and sizing apples, 7246
- Bryant, Paul J., low pressure application of orbitron, 16909
- Bryers, Richard W., two-phase metastable flow, 6449
- Bryozoa, *see* Victorella.
- Brzezinski, Zbigniew, remarks, May 22, 1967, 14676
- BSRL, *see* Behavioral Science Research Laboratory.
- Bubbles:
- air, properties at air/sea interface, influence of surface-active material, 17088
 - boiling in water, activation, growth, and detachment from artificial nucleation sites of known geometry and size, 14491
 - mechanics in zero-gravity environment, 5164
- Bucerotidae, *see* Hornbills.
- Buchanan, H. J., orbital investigation of propellant dynamics in large rocket booster, 15117
- Buchanan, Henry, temperature-sensing telemetry system for rhesus monkeys, 17360
- Bucharest, Rumania, Hygiene Institute, 40 years in service of public health, 12723
- Buck, Alan D., investigation of concrete in Eisenhower and Snell locks, St. Lawrence Seaway, 13987
- Buck, Gerald E., study guide for physics 2, high school course, 17687
- Buck Island Reef National Monument, general information, 15609
- Buckley, Donald H.:
- effect of recrystallization on friction properties of metals in single-crystal and polycrystalline form, 15574
 - friction characteristics of single-crystal and polycrystalline rhenium vacuum, 9912
 - possible relation of friction of copper-aluminum alloys with decreasing stacking-fault energy, 8490
 - recrystallization and preferred orientation in single-crystal and polycrystalline copper in friction studies, 8481
 - sliding friction of members of platinum metals group, 15578
- Buckley, John D., oxidation of JT graphite composites, 18053
- Buckley, John E., wages and related benefits, metropolitan areas, etc., 14284
- Buckley, Michael P., relief, 7614
- Buckling, *see* Strains and stresses.
- Buckner, Robert C., fescue foot in cattle, what to do about it, 14750
- Buckner, Russel L., soil survey of Bremer County, Iowa, 18213
- Budapest, Hungary, International fair, displays, 12687
- Buddhism, Soviet view, 2429
- Budget Bureau:
- Federal research and development program, decision-making process, comments by, report, 15001
 - statistical reporter (periodical), 3900
- Budget Concepts, President's Commission on, *see* President's Commission of Budget Concepts.
- Budget examiners, calling all majors for budget careers in Federal agencies, 10431
- Budget Joint Committee, create, report, 10754
- Budget of United States:
- better information for decision-making in Federal budget (remarks), 1060
- 1968—
- August review, hearing, 17562
 - budget in brief, 5805
 - departmental edition, 4256
 - appendix, 4257
 - District of Columbia—
 - departmental edition, 4258
 - document edition, 4482
 - document edition, 4481
 - appendix, 4483
 - hearings, 7733, 9301
 - special analyses, 4259
 - planning-programming-budgeting system—
 - hearings, 15158
 - initial memorandum, 16415
 - official documents, 13866
 - print additional copies, report, 15140
 - selected comment, 13867
 - print additional copies, report, 15135
- Budgets, *see* Budget of United States—Budgets (family and personal)—also names of departments, etc.—also other headings beginning Budget.
- Budgets (family and personal):
- city worker's family budget for moderate living standard, 17894
 - guide for young couple, 17318
 - income and budget costs by family type, revised equivalence scale for estimating, 17900
- Budworms:
- moths, ultrasonic speaker for studies of acoustic sensitivity, 4083
 - spruce, 1944-56 outbreak in eastern Oregon, differential effects, 1097
- Bue, Conrad D., flood information for floodplain planning, 9567
- Buffalo, N.Y.:
- Ansley Wilcox House acquisition, etc. law, 422
 - area wage survey, 11311
- Buffers:
- field effect transistors improve buffer amplifier, 17961
 - SPAD formatter, buffer interface between satellite prediction computer and display, 8593
- Bugbee, Robert E., revision of chalcid wasps of genus *Eurytoma* in America north of Mexico, 8536
- Bugg, Frank M., low-speed tests of all-flexible parawing for landing lifting-body spacecraft, 11550
- Bugs, *see* names of bugs.
- Building:
- building a better America, 16709
 - concrete masonry for cabins, building plan, 5664
 - construction—
 - activities of United States, 1965-66, in Viet Nam, GAO report, 11159
 - bids, quality estimates prepared for solicitation, GAO review, 14152
 - construction and architect-engineering contracting services for AEC work, guide, 13350
 - contracts, Defense Dept. awards, need for compliance with truth-in-negotiations act of 1962, GAO report, 12588
 - educational facilities, guide to Federal financial assistance programs, 10931
 - efficiency and economic reform, USSR, 4977
 - expenditures of State and local governments, 5891-93, 10384, 16033
 - facilities for health research, etc., Public Health Service grants and awards, 11755

Building—Continued

construction—continued
 know the soil you build on, 11927
 projects, inspection controls over concrete placements, Public Buildings Service, GAO review, 11153
 radiation-safe structures investigated, USSR study, 6523
 construction reports—
 quarterly public, 5891-93, 10384, 16033
 residential alterations and repairs, 5850
 construction safety, site clearing, 17887
 fire resistant construction of home, farm buildings, 15849
 hardware, Army technical manual, change, 107, 10271
 home and farm, selection and use of wood products, 7264
 home construction, publications, price list, 7057
 items on construction, USSR articles, 6481
 large scale maps for construction planning, requirements, Hungary, 4981
 library services and construction act, extend and amend—
 law, 1135
 report, 16298
 materials, Federal item identification guides for supply cataloging, supplements, 3288
 outlook for homebuilding and 1967 economy (remarks), 7570
 PACAF basic bibliography, 13266
 permits, 1135-36, 8937, 14818
 housing authorized, 3155, 8937, 14818
 summary statistics, 3136
 problems of science of production engineering, USSR study, 2432
 publications available from Division of International Affairs, HUD, 8205
 science facilities, planning, design, and construction, literature, list, 14561
 USSR industrial development, translations, 4017
 see also Construction Industry.
 Building communities with new jobs, 2159
 Building export markets for U.S. farm products, 6361
 Building for clean water, 8010
 Building machinery—
 construction machinery, current industrial reports, 3170, 5857, 17430
 Federal item identification guides for supply cataloging, supplements, 3285
 USSR industrial development, translations, 4017
 Building management officers in Veterans Administration hospitals, nationwide, 18249
 Building science series, 15584, 18075
 Building trades, union wages and hours, 14301
 Buildings:
 concrete structural design, Army technical manual, 7391,
 construction of radiation-safe structures investigated, USSR study, 6523
 foundation design, procedures, emergency construction, Army technical manual, 10276
 Historic American Buildings Survey selections, 11616
 historic American, Georgetown commercial architecture, Wisconsin Ave., northwest Washington, D.C., 11616
 historic sites and buildings, national survey, prospector, cowhand, and sodbuster, historic places associated with mining, etc., in trans-Mississippi West, 13008
 load assumptions, Army technical manual, 108
 prefabricated structures, Federal item identification guides for supply cataloging, supplements, 3288

Buildings—Continued

static structures, classification definitions, 13044
 wood structural design, Army technical manual, 10273
 Buildings, see also Apartment buildings—
 Public buildings—also names of buildings.
 Bullett, Ernest, relief, 264, 547
 Buis, Gabe R., application of Lyapunov stability theory to some nonlinear problems in hydrodynamics, 16915
 Bulgaria:
 Academy of Agricultural Sciences, new members and corresponding members, 1205
 Academy of Sciences—
 history and achievements, 6557
 Vice President Vladimir Georgiyev interviewed, 4991, 6480
 analytical chemistry, current status and prospects for development, 1231
 claims of American nationals, timely determination, hearing, 12300
 claims of inhabitants, payment, hearing, 732
 clinical observations of individuals contaminated by pinacolic ester of methyl-fluorophosphine acid, 1230
 Communist Party, and development of natural sciences, 9th congress, 2465
 hydrometeorological service tasks discussed at 9th Congress of Bulgarian Communist Party, 11263
 industrialization over 2 decades reviewed, 15424
 mineral industry, minerals yearbook chapter, 6645
 new pay scales for scientific and technical workers, 1303
 officials, 1966 directory, 4934
 organizational fundamentals, principles and standards of party life, 6566
 pharmaceutical development, 15391
 physics, status and perspectives, 16758
 regulations for setting up socialist brigades for technical progress, 12665
 scientific and technical progress, 1967 program, 6494
 scientific organizations, decrees on operating under their own accounting systems, 5030, 6586
 scientific research, problems of coordinating, 2435
 scientists' role in radiation biochemistry, crystal chemistry and cybernetics, 1159
 study mission report, 7809
 veterinary medicine, problems, 1208
 Bulgarian State Economic Association for Computer and Organization Technology, general information, 9620
 Bulgurin, E. H., veneer yields from Lake States, quaking aspen, 1095
 Bulgur, see Wheat.
 Bulkheads, composite fabrication development, 6752
 Bulletins, see Farmers' bulletins—also names of departments, etc., issuing bulletins—also subjects.
 Bullis, Harvey R., Jr., exploratory fishing and gear research, 2275
 Bullock, J. Bruce, price spreads for pork, 4126
 Bulls, DHIA sire summary list, Ayrshire, Guernsey, etc., 7245
 Bumpers, ballistic limit of double-walled meteoroid bumper systems, 9893
 Bunchgrass, ponderosa pine-bunchgrass range in Colorado, cattle grazing effects, 14764
 Bundy, William P., address, Aug. 15, 1967, 17220
 Bunker oil, see Fuel oil.
 Bunyan, Jack L., comparison of financial operating data of affiliated food wholesalers, 4123

- Buoyancy, combined with shear, effects on weak homogeneous turbulence, 11542
- Bur, Thomas R., explosives in rock, 5124
- Bur oak, *see* Oak.
- Burbank, Jeanne:
plate materials of lead-acid cell, anodic oxidation of PbSO₄, etc., 11672
refractometric sensing of H₂SO₄ specific gravity in lead-acid cell operation, 18112
- Burch, Franklin W., cartographic records of American Expeditionary Forces, 1917-21, preliminary inventory, 14508
- Burdick, Lawrence T., performance, story of the handicapped, 3680
- Burgess, Ernest M., immediate postsurgical prosthetics in management of lower extremity amputees, 15171
- Bur-Gheula, Somalia meteorite, composition, 18089
- Burgin, Vera E., decisions of Department of Interior, 17845
- Burk, Sanger M., jr., static aerodynamic characteristics of 3 ram-air-inflated low-aspect-ratio fabric wings, 17007
- Burke, J. E., simulator evaluations of advanced integrated display and control systems, 14374
- Burkham, D. E., hydrology of Cornfield Wash area and effect of land-treatment practices, Sandoval County, N. Mex., 6412
- Burkig, Valerie C., thermal absorption in seeded gases, 12866
- Burleson, W. E., mineral industry of New Mexico, 6681
- Burley tobacco, *see* Tobacco.
- Burlington, Vt., area wage survey, 11323
- Burma:
background notes, 14664
capsule facts for Armed Forces, 15023
mineral industry, minerals yearbook chapter, 2550
- Burmeister, Louis C., NASA contributions to advanced valve technology, 15518
- Burmester, B. R., avian leukosis complex, 50
- Burner fuel oil, *see* Fuel oil.
- Burners, *see* Incinerators.
- Burning of land:
effects of slash burning on conifer regeneration in southeast Alaska, 4834
forested loess soils after repeated prescribed burns, properties, 8091
herbicides fail to insure success of brush-field prescribed burn, 6366
prescribed burning improves Piedmont loblolly pine seedbeds, 12582
slash-burn agriculture among mountain tribes of central Vietnam, 14246
surface soil recovers quickly after burn, 8097
- Burns, Anne, turbulence in clear air near thunderstorms, 6222
- Burns, B., exploratory development of radiotracer propellant gauge, 12016
- Burns, Rowland E., explicit solution for Lagrange multipliers on singular subarc of optimal trajectory, 16982
- Burns and scalds:
active infusion therapy for patients with deep extensive burns, USSR study, 14275
retinal burns from low-yield nuclear detonations, threshold distances, 69
- Burns Waterway Harbor, proposed breakwater, stability, hydraulic model investigation, 7933
- Burnt River and Valley, Oregon, ground-water reconnaissance in area, 14182
- Burrell, M. O., plane isotropic buildup factors for bremsstrahlung calculations, 15565
- Bursik, Joseph W., pseudo-sonic velocity and pseudo-Mach number concepts in 2-phase flows, 2712
- Burt, Eddie C., efficiency of flail-type machine in destroying cotton squares, 7242
- Burt, Stanley W., grading and sizing apples with brushes, 7246
- Burton, R. L., mass rearing fall armyworm, 8805
- Burton, Robert V., fluid state hydraulic damper, 10286
- Burton, S. F., small nuclear power plants, 5769
- Burt, Everett J., jr., plant relocation and core city worker, 16711
- Burundi:
background notes, 11815
capsule facts for Armed Forces, 15908
labor conditions, 6618
Rwanda boundary, study, 1632
Tanzania boundary, study, 1630
- Busby, Douglas E.:
biomagnetics, considerations relevant to manned space flight, 16911
clinical space medicine, 14399
- Busemann, A., geometric theory of optimum disorbit problems, 8427
- Buses, *see* Motorbuses—School buses.
- Bush, Joseph C.:
industry wage survey—communications, 6604
laundry and cleaning services, 14298
synthetic fibers, 8317
textile dyeing and finishing, 2501
- Business:
activist approach to Government-business relations (address), 10327
administrative management course program, topics, 1598, 7109
aids, overseas investment, 1152
American business is hiring Job Corps graduates, 2162
balance of payments and business outlook in United States (remarks), 5949
BDSA, how it works with business for business, 143
business-Government relations (addresses), 1937, 7569, 9010, 16092
business-Government, their interdependence (remarks), 16093
Business Opportunity-Federal Procurement Conference, guidelines for program, 8923
census, 1963—
major retail centers, area statistics, bound volume, 1832
retail trade area statistics, 10369-340
bound volume, 151
retail, wholesale, services, bound volumes, announcement and order form, 7453
retail, wholesale, services, bound volumes, announcement and order form, 7453
selected services subject reports, bound volume, 8932
special reports, 4270, 5816-17
wholesale trade subject reports, bound volume, 7459
census publications, price list, 7056
Commerce Department primary Government agency responsible for dealing with problems (address), 142
commercial firms, technology acquisition channels and NASA dissemination program, 14375
conditions, national summary, 3600
county business patterns—
bound volumes—
Alabama-Illinois, 17425
Indiana-Missouri, 17426
Montana-Oregon, 17427
Pennsylvania-Wyoming, 17428
U.S. summary, 17424
CBP series, 168-175, 1859-71, 4306-21, 5851, 7475, 10344-351, 12042-65, 13365-385, 14819-824, 15987, 17424-482
announcement and order form, 5852
U.S. summary, 7475, 15987
creative partnership with Government for balanced economy (address), 9012
credit and assistance, code of Federal regulations, 11034

Business—Continued

cycle developments, report, 3067
 delivers goods to marketplaces of world
 in final analysis (remarks), 240
 doing business, with—
 Eastern European countries (address),
 2416
 Federal Government, guide, 1104
 enterprise statistics, 1963, preliminary re-
 ports, 3241
 establishing in—
 Belgium, 4435
 Chile, 1943
 East Africa, 4444
 Ethiopia, 13465
 Federal Republic of Germany and West
 Berlin, 10458
 France, 4431
 Greece, 9018
 Iran, 13467
 Italy, 17475
 Japan, 232
 Netherlands, 12138
 Peru, 231
 Taiwan, 10462
 Thailand, 13464
 United Kingdom, 17476
 foreign firms, sources of credit informa-
 tion, 15340
 foreign practices, 9602
 Government-business relations component
 in your marketing mix (address), 10329
 income tax returns, statistics, 6461
 indexes, monthly, 3068
 Indian development, program, 2388
 international, publications, checklist, 6467,
 15359
 living with Government creatively (ad-
 dress), 10454
 loans, revision in quarterly survey of in-
 terest rates, 11059
 Navy prime contractors, selling to, direc-
 tory, 17100
 outlook and national economic policy
 (remarks), 13453
 overseas business reports, 229-233, 1941-
 47, 3666, 4431-46, 5951-56, 7573-80,
 9013-20, 10458-463, 12132-138, 13455-
 466, 14880-882, 16100-108, 17474-482
 private enterprise and the city (address),
 9580
 private enterprise and United Nations
 development program, how to bid on
 special fund projects, 4262
 public regulation, Treasury view (re-
 marks), 11884
 publications, price list, 5418
 SBA's local development company loans,
 economic growth at community level,
 1599
 service checklist, guide to Commerce Dept.
 publications, weekly, 3069
 small business—
 AID circular, 3004
 Association and Industry Management
 Service for Small Business, general
 information, 15729
 bibliographies, 1600, 2856, 5493-95,
 7112-13, 10077, 15731-732, 17194
 corn marketing by Commodity Credit
 Corporation, impact, report, 668
 crime protection insurance, contribu-
 tions of science and technology, 16437
 displaced, economic injury disaster
 loans, management and technical aid,
 14643
 distribution problems, hearings, 7817
 print additional copies, reports, 916,
 2030
 drug industry, problems, hearings, 12317
 dry cleaning, starting and managing,
 5497
 financial assistance programs of SBA,
 review, 16439

Business—Continued

small business—continued
 Government activities affecting, report
 of Attorney General on problems of
 displacement under programs of public
 improvement, 4631
 how to obtain Government contracts and
 subcontracts, 7110
 impact of crime—
 hearings, 12428
 report, 16365
 impact of tax exempt foundations,
 hearings, print additional copies, re-
 ports, 13653, 13820
 investment act amendments of 1966—
 law, 453
 report, 4588
 investment act amendments of 1967—
 hearings, 10820, 15020
 law, 17549
 reports, 12391, 14961, 14982, 16261
 investment act, text and related tax
 matters, 9330
 investment companies, investigation,
 hearings, 10845
 investment company program—
 examination function of SBA, GAO
 review, 16675
 review, hearings, 2062
 investment program of SBA, report, 4509
 management series, 2857, 13118
 pooling defense production, research
 and development, 5496
 problems in urban areas, report, 4512
 problems in smaller cities and towns,
 hearings, 10678
 problems, investigation, authorization,
 report, 4610
 problems of tool and die industry and
 associated problems of manufactur-
 ers and distributors of machine tools,
 hearings, 2061
 products list circular, new products de-
 velopment, 3775
 protection act of 1967—
 law, 17549
 reports, 14961, 14982, 16261
 regional export industries and institu-
 tions over next decade, potentials and
 problems of developing, hearings,
 17678
 regulatory and enforcement agencies,
 activities relating to, report, 4513
 retail, operating costs and ratios, bibli-
 ography, 5493
 role in air transportation industry,
 report, 4511
 select committee to conduct studies,
 etc.—
 creating, report, 4518
 expenses, report, 7679
 small business and labor surplus area
 specialists, Defense Dept., list, 7866
 starting and managing series, 5497,
 8679, 15733
 status and future, hearings, 16440,
 17679
 subcontracting and set-aside programs,
 report, 4510
 tax guide, 2413
 vending machines, starting and manag-
 ing, 8679
 special current business reports (series),
 3573
 statistics, Federal reserve chart book,
 3315
 historical supplement, 16591
 statistics, weekly, 3070
 survey of current business—
 monthly, 3925
 weekly supplement, 3070
 taxation, key factor in decisions, 1598
 textile program, unique approach in busi-
 ness, Government relations (address),
 10470
 ways farmers do business, 2229

INDEX 1967

Business—Continued
your business partner, transportation (remarks), 9751
Business and Defense Services Administration:
BDSA looks at domestic aluminum situation (address), 5806
functions and programming philosophy (remarks), 10334
how it works with business for business, 143
mobilization programs, hearings, 13543
official texts, 3054
press releases, 3706
publications, list, 1827
Business consolidations:
cement industry, vertical mergers, enforcement policy, 4799
retail grocery store companies, 2172
Business Economics Office, press releases, 3707
Business men:
American, what will Government be asking businessmen to do in respect to nation's balance of payments in 1967? (remarks), 237
credit, moderation today means progress tomorrow (address), 144
Defense Dept. small business and labor surplus area, specialists designated to assist, list, 7866
guide to specifications and standards of Federal Government, 4885
how to do business with Federal Government, guide, 1104
interchange of young executives between Government and business (address), 17469
Kennedy Round impact (address), 18219
State Dept. guide to key officers of Foreign Service posts, 3462
Busing kids to suburbs, 10928
Buss, Keen, interspecific hybridization of esocids, etc., 12551
Busse, Jon E.:
Aerobee 150 propulsion failure, 6851
NASA Aerobee sounding rocket launchings, 15754
Bussey, Ellen M., colored minorities and present British policies, 9747
Butanes, octafluorocyclo-, use as refrigerant in saline water conversion by freeze separation, 12644
Butcher, Stanley J.:
job hazard analysis, 14280
preventive maintenance for safety, 8293
promoting worker interest in safety, 8288
safe working surfaces, 8294
Butler, C. O., rail impact testing on long travel shock mounts, 14805
Butler, Joseph, or heirs, relief, 610
Butrum, Ritva, relief, 15072
Butt Mountain, Clinton hematitic sandstone deposits in area, 12819
Butte County, Calif., fire hazard inspection procedures, evaluation, 14109
Butter:
futures, commitments of traders, 3112
futures trading and open contracts, 3367, 3369
Butterflies:
genus *Calycopis* Scudder (*Lycaenidae*: *Theclinae*), preliminary revision, 5309
new genus *Calystryma*, etc., 14537
Buttermore, Paul M., petroleum refineries in United States and Puerto Rico, 15472
Butyrlthiophenes, infrared vibrations of benzene rings in condensed thiophenes, 8377
Buyers, see Purchasing agents.
Buying, see Purchasing.
Buzbee, William A., relief, 278, 809
BW, see Biological warfare.
BWR (boiling water reactor), see Reactors (atomic).
By the people, for the people, 5375
Byers, Harry E., relief, 324, 819

Byurakanskaya Astrophysical Observatory, general information, 1198
C
C.A.B., see Civil Aeronautics Board.
C&MS, see Consumer and Marketing Service.
C & S Express, Inc., motor carrier accident, 16873
C.C.C., see Commodity Credit Corporation.
C.E.E.C., see Coastal Engineering Research Center.
C.F.S. series, 1074-75, 3024, 3073, 3335-36, 3338, 3363, 3378, 3386, 3530, 3533, 545-46, 3553, 3564, 3621, 3628, 3638, 3836, 3876, 3884, 3934, 4038, 8013-18, 9502-13, 11072-74, 12540-544, 14054, 16610-618, 17769-771
C.R.R.E.L., see Cold Regions Research and Engineering Laboratory.
CA series, 8693, 10157, 17301
C.A.B., see Civil Aeronautics Board.
Caballol, Felix C., relief, 12339, 16210
Cabbage, caterpillar control in South, 15847
Cabeza Prieta Game Range, mammals, list, 11089
Cabinets, see Telephone cabinets.
Cabins, concrete masonry construction, building plan, 5664
Cables:
cable TV, requests filed under FCC rules, 3269
communication lines, USSR book excerpts, 15392
Federal item identification guides for supply cataloging, supplements, 3287
fixed, self-braking mechanism used by emergency escape system, 5223
see also Connectors (electric)—Electric cables—Submarine cables.
Cacao:
clone collection of Agriculture Dept., description, 10148
foreign agriculture circulars, 3345
Cache Creek, drainage basin in coast ranges west of Sacramento, Calif., sediment transport, 11181
Cachuma, Lake, elimination of stratification, progress report, 11183
Cactus, plant bug genus *Hesperolabops* Kirkaldy, etc., revision, 14539
Cactus Drilling Corp., oil and gas lease, reinstated, 530, 12324
Caddis flies, see Flies.
Cadets, see Air Force Academy, Colo.—Coast Guard—Coast Guard Academy, New London.
Cadigan, Robert A., petrology of Morrison formation in Colorado plateau region, 12613
Cadmium:
abraded cadmium-plated cable connectors repaired by conversion coating, 6746
mineral industry survey, quarterly, 3071
use of steel and tantalum apparatus for molten Cd-Mg-Zn alloys, 8397
Cadmium sulfide:
film cell, mechanism, 6889
spectrum, effect of optical radiations and water vapor on trapping, 14455
Caffey, Eugene M., antipsychotic, anti-anxiety, and antidepressant drugs, 2962
Cailisch, Frank, despatches from U.S. consuls in Matamoros, pamphlet, 18060
Cages, cylindrical screen, for rearing bark beetles, 14114
Cages (bearing):
high-temperature materials, evaluation, 5274
Cagle, Caroline H., changes in time and savings deposits, 11049, 14039, 16589
Cahn, Patricia L., American education, 3028
Caignet, Alfredo Borges, see Borges Caignet, Alfredo.
Cain, Dorothy S., infrared spectra of elastomers, 15636

Cahn, Stephen M.:

low doses of acetazolamide to aid accommodation of men to altitude, 1736
oxygen deficit incurred during hypoxia, relation to excess lactate, 7355
tissue oxygenation during hemorrhage, 15895

Calson disease, *see* Aeroembolism.

Calanoida, *see* Copepods.

Calcasieu River and Valley, Gulf outlet, navigation maps, S383

Calcium:

concentration related to parotid fluid flow rate, 10239

mobilization resulting from conditions of inactivity in *Macaca irus* monkeys, study, 5707

parotid fluid, flow rate effect on level, 7363
serum ionic, measurement by use of specific ion electrode, 13271

Calcium carbonate, Birch Creek, travertine depositing stream, Inyo County, Calif., physical and chemical description, 8171

Calcium fluoride, ionic conductivity, 6866

Calcium isotopes, Ca 43, differential cross sections for (d, α) reaction on scandium 45, 16989

Calcium sulfate, precipitation investigation, final report, 14198

Calculating machines:

current industrial reports, 8942, 10356, 16000

Calculations, *see* Numerical calculations.

Calculators:

stress, speedily converts strain data, 12908

veterans benefits, 6045

Calculus of variations, *see* Functional analysis.

Caldera, *see* Craters.

Caldor, Selma, market indicators for Asia and Oceania, 9013

Caldwell, Joseph M., coastal processes and beach erosion, 10953

Caldwell, Ralph D., relief, 255, 561, 800

Caldwell, Warren W., Black Partizan site, 5499

Caldwell County, Ky., soil survey report, 8695

Calendar of events in Library of Congress (periodical), 3072

Calendars, Air Force libraries, buying calendar for annual publications, 8859

Calendars (of business), *see* Court of Claims—House of Representatives—Senate.

Calif. *see* Calves.

Calhoun, Willis A., metallurgical testing of Hawaiian ferruginous bauxites, 11374

Calibration:

analog to digital encoders, analysis, 9891
calibrating ultrasonic test equipment for checking thin metal strip stock, 12832

calibration and use of dosimeters, USSR studies, 6565

current meter performance, laboratory determination, 4729

divider, high voltage potential, calibrated by simple device, 5145

dynamic, detectors for remote sensing systems, 9809

high voltage facility, design and operation, 5292

microphones at high sound pressure levels, 16966

pressure transducers, automated tester permits precision from 0 to 1050 psi, 15493

rectilinear accelerometer possesses self-calibration feature, 1453

services of National Bureau of Standards, inserts, 8518, 9937-39, 12980, 15585-587, 17032

simulation, liquid-hydrogen turbine-type flowmeter, using high-pressure gas, 5251

spectrum analyzers, means for rapid method, 14443

Calibration—Continued

static calibration of ejector unit for simulation of jet engines in small-scale wind-tunnel models, 6899

system for more complete calibrations of dynamic-pressure transducers, 9854

volume-ratio calibration system for vacuum gauges, 6802

Calibrators, pressure switch, design concept, 6763

California:

air transport of strawberries, factors affecting market quality, 1966 spring shipments, 1704

Arizona boundary compact, consent of Congress, report, 4499

black oak, increasingly valuable species, bibliography, 14105

burrewing acantate anemone, new species, 6952

census of agriculture, 1964, State and county statistics, 17442

census of mineral industries, 1963 area statistics, 5823

central and northern, water pollution, hearings, 15035

central, petrology of sediments underlying areas of land subsidence, 12807

climatological data, 3096

coast pilot supplement, 5944

coastal basins between San Francisco Bay and Eel River, surface water hydrology, 15315

collective bargaining groups for poultry feed prices, 7944

commercial forest area and timber volume, 4859

county business patterns, 4307, 13365

dwarf mistletoe parasitizing true firs in California, biology and pathology, 5685

electric rate book, 14027

elimination of stratification at Lake Cachuma, progress report, 11183

forest recreation sites, accidents caused by hazardous trees, 11125

highway safety study, Operation 66, joint engineering-enforcement project report, 1594

landings, fish and shellfish, 3073

low temperature reaction zones and alpine ultramafic rocks, 17517

mineral and water resources, 2124

mineral industry, minerals yearbook chapter, 6646

national forests—

areas of limited public use, 16651

recreation facilities development, 17799

natural resources, 15325

occurrence of selected minor elements in waters, 11186

Pacific slope basins, magnitude and frequency of floods, 11188, 14177

Permian tethyan fusulids, 16699

precipitation data, hourly, 3401

radioactivity, airborne, 1953-56, maps, 1801

recreational areas, hazard from butt rot defect in lodgepole pine, 1093

rice stocks and movement report, 3074

sardine and anchovy larvae distribution, etc., in California Current region, 8036

sediment transport in Cache Creek drainage basin in coastal ranges west of Sacramento, Calif., 11181

southern—

new species of *Victorella*, 9953

Nov. and Dec. 1965 floods, 1115

water resources, summaries, 1127, 12616

war on poverty, examination, hearings, 16427

water pollution, south Lake Tahoe, hearings, 2056

Water Resources Division, U.S. Geological Survey—

activities, 1106-9

reports, lists, 1126

INDEX 1967

California—Continued
welfare recipients, nursing home care and payments for drugs, GAO report, 2354
see also Palm Springs Reservation.

California Debris Commission, nominations, hearing, 12427

California Institute of the Arts, Walt Disney gold medal, coined bronze duplicates, furnish to, report, 16360

Calignae, *see* Copepods.

Caligoida, *see* Copepods.

Callaway, Thomas R., housing in Ivory Coast, 6419

Calonge-Diaz, Carlos M., relief, 9236

Caloric nystagmus, *see* Nystagmus.

Calories, salmon diets, studies of caloric levels, 8042

Calorimeters:
fast-acting type for measuring heat output of plasma gun accelerator, 12911
heating rates, numerical method for determining from thick-calorimeter data, 8486
slug-type, sensing disk invention for higher temperature stability, 11482

Calorimetry:
bomb, feces preparation, improved method, 1742
indirect, in low pressure environments, 11957

Calumet River, pollution of interstate waters, progress evaluation meeting, 14053

Calvert Formation, fossil marine mammals from Miocene Calvert Formation of Maryland and Virginia, 1530

Calves:
calf barn, open front pen type, building plan, 41
calf crop, 7196, 7297, 14693
on feed, 5681
portable pens, building plan, 5639

Calycolpis, *see* Butterflies.

Calymenid and other Ordovician trilobites from Kentucky and Ohio, 16698

Calystryma, *see* Butterflies.

Cambarus:
crayfish from Alabama caves, origin of genera Orconectes and Cambarus (Decapoda: Astacidae), 17050
range and variations of subspecies of *Cambarus longulus*, 6947

Cambodia:
background notes, 15753
capsule facts for Armed Forces, 15922
mineral industry, minerals yearbook chapter, 11358-359
Thailand boundary, study, 2883
Thailand boundary, study, 2883

Cambrian period:
rocks of east-central Alaska, stratigraphy, 6404
rocks of Groom district, Nev., 14169

Cameras:
cloud droplet camera, 4202
solid-state wide-range low power camera timer for space applications, 5240
TV, electronic shutter gates image orthicon on and off, 15540
TV, subminiature deflection circuit operates integrated sweep circuits, 11479

Cameron:
investment guaranties, agreement, 11868
labor conditions, 1367

Cammett, J., residual strains and displacements within plastic zone ahead of a crack, 5489

Camouflage, deceptive advertising as to sizes of viewable pictures shown by television receiving sets trade regulation rule, 6327, 11068

Camp, Thomas F., Jr., colorectal polypoid lesions, 14772

Camp, Thomas H., owning or leasing of covered hopper cars by farmer cooperatives, 16545

Camp, William B., nomination, hearing, 4632

Campaign expenditures:
Presidential election campaign fund act—law, 513
summary, 9177
legislative history, 7762
report, 702
Senate amendments, summary, 4567
Presidential election campaign fund act, guidelines—
law, 12168
legislative history, 13719
report, 10614
reporting, revise laws, hearings, 739

Campaign Expenditures, Special Committee to Investigate, House:
expenditures, pay from contingent fund, report, 640
report, 4516

Campaigns (political), *see* Elections.

Campbell, Arthur A., natality statistics analysis, 8662

Campbell, Bernard J., relief, 852

Campbell, Bruce G., digest of Federal natural resource legislation, 13948

Campbell, C. E., lunar, planetary, and solar topography, Project Tech Top, 5163

Campbell, C. J., periodic mowings suppress tamarisk growth, increase forage for browsing, 6368

Campbell, Dewey, relief, 16172

Campbell, George G., underground combustion oil-recovery experiments in Venango second sand, Reno pool, Venango County, Pa., 11372

Campbell, James F., longitudinal aerodynamic characteristics of high-drag bodies, 9892

Campbell, Robert D., information system for urban planning, 11207

Campbell, Roy E., strawberry insects, how to control them, 10167

Campbell, Russell H., areal geology in vicinity of Chariot site, Lisburne Peninsula, northwestern Alaska, 8162

Campbell County, Tenn., forest inventory statistics, 18239

Campello, Ernesto M., relief, 10539, 13481, 13739

Campers:
activity patterns, 8071
cost implications of camper and campground characteristics in central Colorado, 14113

Campgrounds, *see* Camps.

Camping:
in National park system, fees, facilities, etc., 15610
on public lands, State sites, facilities, etc., 8328

Camps:
campground tramping & ground cover response, 14138
cost implications of camper and campground characteristics in central Colorado, 14113
successful private campgrounds, study, 8110
summer, opportunities for disadvantaged children, expand, hearings, 15024, 15171, 16427, 17601

Canada:
allow use of British Columbia ferries for Alaska-bound cargo, hearing, 13851
automotive products, tariff elimination agreement, implementation, annual report, 7803
automotive products, trade, agreement, 2924
centennial—
extend congratulations, report, 9270
5-cent commemorative postage stamp—address at issuance, 11697
poster, 10024

Canada
coop
ag
custo
defen
me
egg p
Grea
ing
Gut I
immi
kn
to
light
La
loan
(L
mark
mete
ag
mine
tor
nava
gen
ag
pensh
pensh
pilot
St.
plant
15
plant
radar
ou
Redc
len
me
St. I
tar
ag
sellin
supp
he
me
rep
tarif
me
telec
of
can
unde
Ide
whea
wint
me
Canada
Grou
ports
Canada
warn
Canal,
1008
Canal Z
Arme
rep
citiz
la
re
insu
U.S.
ne
pa
Canal
148,
Canale
Canals
sea-l
co
co

Canada—Continued
 cooperative study of polar cap ionosphere, agreement, 17248
 customs tips for Expo 67, 9358
 defense, civil emergency planning, agreement, 17249
 egg production tests, 1966 report, 4085
 Great Lakes fisheries convention, amending, report, 6064
 Gut Dam claims, agreement, 8725
 immigration inspection, what you should know at time of entry to U.S. after visit to Expo 67, 11213
 light list and other marine aids, Great Lakes, 9003
 loan of long range aid to navigation (Loran-A) equipment, agreement, 2907
 market profiles, 13462
 meteorological research with rockets, agreement, 5548
 mineral industry, minerals yearbook chapter, 6647
 naval base leased to United States, Argentina, Newfoundland, ferry service, agreement, 5534
 pension and medical care legislation, 5516
 pension plan, agreement, 15769
 pilotage services on Great Lakes and St. Lawrence Seaway, agreement, 14689
 plant quarantine import requirements, 15829
 plant regulatory officials, 5618
 radar, continental defense system, phase-out of certain stations, agreement, 2932
 Redcliff, Newfoundland, land adjacent to leased bases area, continuing use, agreement, 7155
 St. Lawrence seaway, Montreal/Lake Ontario section tolls, Welland Canal, lockage fee, agreement, 11872
 selling in Canada, 16104
 supplementary income-tax convention—
 hearing, 17651
 message from the President, 4575
 report, 17620
 tariff concessions, staging, amending agreement, 17247
 telecommunication, pre-sunrise operation of certain standard (AM) radio broadcasting stations, agreement, 15780
 underwater and floating-leaved plants, field identification guide, 15267
 wheat marketing, 4816
 winter maintenance of Haines Road, agreements, 8728, 17230
 Canada-United States Interparliamentary Group, meetings, Senate delegation reports, 764, 15058
 Canadian border to Eureka, Calif., coastal warning facilities chart, 14717
 Canal, Giovanni A., etchings of Canaletto, 10080
 Canal Zone:
 Armed Forces mailing privileges, clarify, report, 10613
 citizenship certificates, authorize issuance—
 law, 424
 report, 923
 insurance business annual report, 12032
 U.S. Army, Southern Command, personnel ordered to, helpful hints, DA pamphlet, 14797
 Canal Zone Government, annual reports, 148, 13356
 Canaletto, see Canal, Giovanni.
 Canals:
 sea-level—
 connecting Atlantic and Pacific Oceans, construction, hearings, 10664
 construction, possible use of nuclear explosive (remarks), 1819

Canals—Continued
 sea-level—continued
 site, joint technical-economic feasibility investigations, agreement with, Colombia, 11835
 Canards, effect in reducing launch vehicle flight loads, 14496
 Cancer:
 aberrant cells, nature, 15674
 biotherapy with cruzin, tumortropism of Trypanosoma cruzi as basis, USSR study, 6548
 bone, health information, 17147
 cancer and filtrable forms of cells, USSR study, 8262
 cause and prevention, 5422
 changes in tissue antigens during process of experimental carcinogenesis, 1156
 characteristics of clients rehabilitated, 7221
 chemotherapy abstracts (periodical), 3075-76
 chemotherapy, development in Soviet Union, 17878
 control, senior clinical traineeships, 14618
 drugs vs. cancer, 15708
 lungs, health information, 1575
 oral early detection using exfoliative cytology, training course summary, 18161
 origin, research on evolution of virus theory, USSR study, 9655
 ovarian, surgical treatment combined with application of radiogold, 5031
 precancer and cancer of cervix uteri, differential cytological diagnosis using fluorescence and phase-contrast microscopy, USSR study, 12700
 progress against, 1966, report by National Advisory Cancer Council, 2835
 rates and risks, questions and answers, 5423
 regional medical programs, guidelines, 13076
 research, recent Soviet work, 1334
 services, facilities and programs in United States, 18154
 skin, health information, 2816
 Soviet studies, 9616
 treating, surgery, radiation, and chemotherapy use, 17165
 tumor cells of human brain, DNA content, cytospectrophotometric research, USSR study, 12757
 uterus, 14628
 what to know, what to do about it, 15686
 Cancer Institute, see National Cancer Institute.
 Candles, chlorate, use as concentrated oxygen source, 14410
 Candy, see Confectionery.
 Canine corps, see Dogs.
 Canisters, passive geodetic satellite canister assemblies, 5184
 Cann, M. W. P., light sources for remote sensing systems, 16893
 Canned foods, report (periodical), 3077
 see also names or classes of foods canned.
 Canney, F. C., mineral resources of Pine Mountain primitive area, Ariz., 11166
 Canning and preserving, home, helpful Government publications, list, 15673
 see also names of commodities canned or preserved.
 Cannon, Emerson T., cratering in low-density targets, 11420
 Cannon, Walter F., Smithsonian journal of history, 3879
 Canonical transformations, phase variable form, 12923
 Cans, metal, current industrial reports, 3169, 4330, 15998
 Cantaloupes, see Muskmelons.
 Cantfil, August F., local union election appeals, analysis, 6592

INDEX 1967

Canton, Steve:
 Air Force civil engineer, 3008
 Air Force comptroller, 15879
 Canton, Ohio, area wage survey, 11328
 Cantrell, George K.:
 factors in job-satisfaction, follow-up, 10241
 job satisfaction and intent to re-list, 7370
 patients' views of patient care during aeromedical evacuation, 17350
 Canvas, general repair for canvas and webbing, Army technical manual, 14801
 Canyon de Chelly National Monument, general information, 6976
 Canyon group, *see* Pennsylvanian period.
 Canyonlands National Park, gravity and magnetic surveys, 2368
 Capacitance, input, miniature electrometer preamplifier compensates, 2666
 Capacitors:
 cryogenic, dielectric properties of promising materials, study made, 17977
 miniature, functions as pressure sensor, 6747
 nonelectrolytic tantalum, development, 2667
 Pharos bank, vacuum clamp switch, 9984
 Pharos 2-MJ, clamps for bank, 11671
 precision, improved temperature and operational stability, 16885
 Cape, *see* name of cape, except names of towns, etc.
 Cape Cod to Sandy Hook, coast pilot, 7556
 Cape Hatteras, N.C. to Brunswick, Ga., coastal warning facilities chart, 14718
 Cape Hatteras National Seashore:
 funds, authorizing appropriation report, 17629
 general information, 8553
 Cape Henry to Key West, coast pilot, supplement, 5943
 Cape Romain National Wildlife Refuge, birds, list, 1777
 Cape Spencer to Beaufort Sea, coast pilot, supplement, 5945
 Capellen, J., bibliography of 1966 mass spectroscopy literature compiled by computer method, 15961, 17393
 Capillaries, mass transfer, 8211
 Capital:
 adjusting balance of payments deficits through capital accounts (remarks), 4781
 financial intermediaries' role in U.S. capital markets, 6303
 fixed, classification by types in branch break-down, USSR study, 15370
 interest rates in capital markets, 6299
 international markets, and financing of U.S. foreign trade and investment (remarks), 6300
 private outflows and balance of payments (remarks), 1968
 Capital of United States:
 Gallaudet College, model secondary school for deaf to serve region, establishment, etc., law, 408
 legislative summary, 8192
 housing program for senior citizens in Nation's Capital, 11593
 International Center for National Capital, general information, 11594
 National Capital parks, activities, 9955
 proposed comprehensive plan for National Capital, 8628-29
 regional development guide, 1966-2000.
 National Capital area, 8530
 transit program for region, modify, report, 16294
 welcome to Washington, 13010
see also District of Columbia.
 Capital punishment, executions, 17128
 Capitalism, new capitalism (remarks), 4428

Capitol:
 buildings and grounds, safety and order within, more effective security regulations—
 hearing, 16434
 law, 17553
 report, 16299
 grounds and contiguous areas, comprehensive plan for development, report, 10769
 history, pictorial story, 517
 House side, parking, create select committee to regulate, report, 12274
 police, employ additional personnel, report, 10584
 Capitol Art and Antiquities Commission, *see* Art and Antiquities of Capitol Commission.
 Cap'n Frank (vessel):
 documentation with coastwise privileges, report, 10764
 Capone, Francis J., determination of boundary-reflected-disturbance lengths in Langley 16-ft. transonic tunnel, 16991
 Capps, Hahn W.:
 Loxostege Hubner species review and descriptions of new species (Lepidoptera, Pyraustidae: Pyraustinae), 8542
 moths of genus *Euchromius* Guenée, etc., 5308
 Capsules, sealed, human water exchange, 12863
 Captioned films for the deaf program, 10929
 Car wash, *see* Carwash.
 Caraway, Bobby L., physiologic baseline studies of zoologic specimens, 7351
 Carbamic acid, carbamates, chemical safety data sheet, 9682
see also Zectran.
 Carbides:
 cathodes of uranium, zirconium and solid solutions, USSR studies, 6532
 manufacture of thin plates from refractory carbides, USSR study, 1296
see also Boron carbide—Molybdenum carbide—Silicon carbide—Tantalum carbide—Uranium carbide.
 Carbohydrates:
 classification definitions, 18123
 isotopic methods for analysis, 18081
 Carbon:
 compounds, chemistry, classification definitions, 18133
 compounds in air contaminants, models for analysis of radiation behind shock waves, 9905
 content and temperature of tantalum carbide, Hall coefficient as function, 18013
 electrochemical reduction of chlorine on carbon in molten lithium chloride-potassium chloride, 17003
 hafnium-carbon phase diagram, investigation, 14340
 impregnated mechanical carbons, wear and friction at temperatures to 1400° F in air or nitrogen, 9915
 phase relations in uranium monocarbide region of system uranium-carbon-oxygen, 12821
 phenolic composite, nondegraded and thermally degraded, thermal and mechanical properties, 16917
 stabilization in stainless steel and its effect on mass transfer in stainless steel-Cb-12r-potassium system, 12864
 Carbon arc, *see* Electric arc.
 Carbon black, mineral industry survey, monthly, 3078
 Carbon dioxide:
 acidity constant of true carbonic acid and its rate of dehydration, use of flow apparatus with glass electrodes, 12734
 adsorption of anthracite, surface area studies, 1412
 adsorption on carbon solids, 5351

Carbon dioxide—Continued

coupled vibration and dissociation relaxation behind strong shock waves, 6908
Earth's horizon radiance profile in 15 micron absorption band, 8417
electrolytic dissociation of $\text{CO}_2\text{-H}_2\text{O}$ using solid oxide electrolyte, study, 6715
interaction with hydrogen chemisorbed on platinum electrode, errata, 8586
measuring content of blood by electrochemical technic, 10243
measuring in inspired air of self-contained breathing apparatus, machine-test method, 1413
1,4 cyclohexanebis (methylamine), regenerative absorbent, 8589
pressures and forces on flare-stabilized bodies in air and in mixture of 85-percent CO_2 and 15-percent air, 17011
profile in Martian atmosphere, flyby measurements, 15569
recombination of carbon monoxide and atomic oxygen at high temperatures, 2718
sensor, electrochemical, 17354
Carbon disulfide:
bench scale production from lignite char and sulfur, 5127
intensity measurements of absorption bands, 1550
Carbon isotopes, carbon-14 labeled stearic acid adsorption on iron, study, 14595
Carbon monoxide:
bibliography with abstracts, 1589
production, flame characteristics causing air pollution, 8378
reaction rates with hydroxyl radicals and oxygen atoms, 16997
recombination of carbon monoxide and atomic oxygen at high temperatures, 2718
Carbon steel, see Steel.
Carbon tetrachloride:
and endrin, comparison of acute effects on livers of rats, 4252
fire extinguishers, hazards, 8151
Carbonates, carbonate-bicarbonate equilibrium research, USSR study, 1250
Carbonan, Pierre, or heirs, relief, 610
Carbonization:
coal—
BM-AGA yields from 13- and 18-inch-diameter retorts, correlation, 2575
conditions, effect on coke size and strength, 16866
Fayette and Greenbrier Counties, W. Va., 2576
high-temperature irradiation and carbonization, products from, comparison, 2572
Logan and Mingo Counties, W. Va., 5130
low-temperature, product yields, Utah coalfields, estimation, 14345
yields and analyses of tars and light oils, 16850
Carbothermic process, magnesium production methods, economic and technical evaluation, 11376
Carcinogenesis, see Cancer.
Carden, Huey D., application of penetrometer technique to lunar surveying staff concept, 11503
Cardiac activity, see Heart.
Cardiac output, see Blood.
Cardiopulmonary responses of resting man during early exposure to high altitude, 7413
Cardiovascular system:
absorption of radioactive albumin from lungs, 13269
airmen who apply insecticides from aircraft may suffer ill-defined effects, 17410
bedrest effect on circulatory response to Valsalva maneuver, 2595

Cardiovascular system—Continued

circulatory function of man during prolonged bed rest, influence of long-term lower body negative pressure, 1734
deconditioning, observed after 10 days bed recumbency, possible preventive effects of muscular exercises and intermittent venous occlusion, study, 8408
forearm vascular responses to lower body negative pressure and orthostasis, 4175
metabolic aspects of acute starvation—performance and cardiovascular evaluation function, 121
ten days, 122
reactions of crewmen during Voskhod-2 orbital flight, 6555
response of man in oxygen-helium atmosphere, 88
responses in anesthetized dogs during repeated decompressions to near-vacuum, 78
systemic vascular reactions by means of complete artificial blood circulation in cats, USSR study, 11287
Cards, card processing operations, tabulating equipment, standard time values for work measurement, 184
see also Catalog cards.
Cardus, David, possible preventive effects of muscular exercises and intermittent venous occlusion on cardiovascular deconditioning observed after 10 days bed recumbency, 8408
Cardwell, W. D. E., ground water, 11179
Career Advancement, Presidential Task Force on, see Presidential Task Force on Career Advancement.
Career guidance, see Guidance.
Careers, see Civil service—Government officials and employees—Occupations.
Carey, James T., handling of juveniles from offense to disposition, 13180-182
Cargo, fixed wing aircraft, restraint design criteria, analysis, 10289
see also Shipping—Shipments.
Cargo carriers, U.S. certificated, domestic, international and overseas routes, map, 4377
Cargo services, see Air carriers.
Caribbean area:
climatological data, 3096
Communist threat to U.S., hearings, 957, 2125, 7816
health information for travel, 13080
islands, mineral industry, minerals yearbook chapter, 14332
vegetable gardening, 15836
Virgin Islands, U.S., our Caribbean gems, description, history, etc., 18240
Caribou County, Idaho, geology of Stewart Flat quadrangle, 11162
Caridad Ares y Fernandez de Bosch, Myriam, see Bosch, Myriam.
Carles, see Teeth.
CARIH (Children's Asthma Research Institute and Hospital) Asthma Week, see National CARIH Asthma Week.
Carillons:
duty-free entry—
Northfield and Mount Herman Schools, 7650, 14884, 16353
University of California, 7649, 14887, 16355
Caritus, see Copepods.
Carl, Herbert A., statewide long-range planning for libraries, 1016
Carleton, Nathaniel P., metastable molecules of atmospheric interest, 4153
Carload waybill statistics, see Railroads.
Carlson, A. J., Carlson-Crittenden device for collection of human parotid fluid, further modification, 10240
Carlson, Robert B., Zimmerman pline moth, 11105
Carman, Hoy F., apple-packing costs in Michigan, 5653

INDEX 1967

Carmel, N.Y., aircraft accident, 4370
 Carmel formation, see Jurassic period.
 Carmichael, Ralph L., integrated approach to analysis and design of wings and wing-body combinations in supersonic flow, 1493
 Carnations :
 blooms, quality and display life after storage in controlled atmospheres, 15863
 production and sales, etc., 10108
 Carnevale, E. H., experimental determination of transport properties of high temperature gases, 11412
 Carney Lake Complex, rocks, petrographic descriptions, 6398
 Carnivores, brain stem and spinal cord, neuronal structure and synapses, USSR study, 12711
 Carolin, V. M., field testing of *Bacillus thuringiensis* for control of western hemlock looper, 14140
 Carolina Beach, N.C. :
 harbor, engineer report—
 document edition, 2006
 document edition, 2006
 Carp, Frances M., patterns of living and housing of middle-aged and older people, 14634
 Carpenter, Anita A., catalog of captioned films for the deaf, 7891
 Carpenter, C. H., ground-water conditions, etc., upper Sevier River basin, Utah, 14180
 Carpenter, Carmen, cumulative index of congressional committee hearings, 2d quadrennial supplement, etc., 13472
 Carpenter, Frances, evaluation of fibro-sampler and digital fibrograph for sampling cotton fibers and measuring length characteristics, 8834
 Carpenter, Kenneth S., directory of public training schools serving delinquent children, 4364
 Carpenter, Richard A., policy planning for technology transfer, 10693
 Carpenter, Stanley B. :
 controlling cull ohia trees by injecting herbicides, 8088
 herbicides for site preparation, broadcast spray by mist blower tested against understory in Hawaii rain forest, 4842
 Carpenters, safe work guide, 11302
 Carpet mills, displaced workers, case study of post-layoff experience, 1360
 Carpets :
 and carpeting, current industrial reports, 4338, 8945, 13393
 duty free sales of certain waste produced from imported conditionally duty-free carpet wool, GAO review, 12591
 Wilton, Brussels, etc., Tariff Commission report, 15808
 Carpio, Arturo V. Fajardo, see Fajardo-Carpio, Arturo V.
 Carr, James N., United States typewriter industry, analysis and trends, 13355
 Carreras, Bienvenido Benach, see Benach Carreras, Bienvenido.
 Carriage system remotely moves drawer over extended distance, 6703
 Carriers :
 common carrier services, applications, FCC, 3269
 interstate commerce act, amend to permit free or reduced rates for governmental bodies only during war or national emergency, hearings, 16398
 interstate commerce acts annotated, 1962 supplement, 6475
 railroad, schedule of annual indices, revised pages, 16728
 see also Air carriers—Communications—Motor carriers—Pipe lines—Telephone—Water carriers—Weapons carriers.
 Carrigan, Anne L., geophysics and space data bulletin, 3377

Carriker, Melbourne A., jr., authority on Mallophaga, posthumous papers, catalog of forms described as new, and bibliography, 15599
 Carrots, commercial growing, 11932
 Cars, see Automobiles—Railroad cars.
 Carter, Arthur W., free-flight characteristics, etc., of ground-effect machine, 9880
 Carter, Lisle C., jr., optimum social welfare, 8194
 Carter, Mary E., arthritis and rheumatic diseases abstracts, 3045
 Carters Dam, construction, wage rate determinations, Labor Dept., GAO review, 4878
 Cartographers, examination announcement, amdt., 13439
 Cartographic technicians, examination announcements, 1910, 13445
 Cartography, see Maps and charts.
 Cartridges, excise tax, amend internal revenue code, reports, 2027, 7698
 Carver, John A., jr., nomination, hearings, 6094
 Carwash, starting and managing, 15733
 Casa Grande Ruins National Monument, general information, 13003
 Cascade (USS) :
 deployment to Malta, agreement, 8745
 Cascade Range, forest floors and soils under true fir-hemlock stands, characteristics, 11139
 Cascade Springs quadrangle, S. Dak., geology, 14168
 Case, Clifford P., United Nations peacekeeping dilemma, 10835
 Caseload statistics, State vocational rehabilitation agencies, 5588
 Cases, see Brief cases.
 Caseworkers, see Social workers.
 Casey, Harold W., residual pathologic changes in central nervous system of dog following rapid decompression, 1743
 Cashlon, W. B. :
 Carmel formation of Zion Park region, southwestern Utah, 11168
 geology and fuel resources of Green River formation, southeastern Uinta Basin, Utah and Colo., 12610
 Cash-registers, repairmen, apprenticeship and training policy, 7373
 Caskey, James E., jr., monthly weather review, 3583
 Cass, Millard :
 addresses—
 Jan. 21, 1967, 5039
 May 24, 1967, 11295
 Cass County, N. Dak., soil survey report—8702
 Cassegrain antennas, see Antennas.
 Cassell, Frank H. :
 addresses—
 Apr. 27, 1967, 10945
 June 29, 1967, 12473
 Cassini, LAC 25, lunar chart, 7321
 Cast iron :
 current industrial reports, 3169
 white, homogeneity characterization of NBS spectrometric standards, 2737
 see also names of manufactured articles.
 Castaneda, David, relief, 13735, 16209, 17512
 Castellanos Lopez, Julio J., relief, 827, 9229
 Castillo, Antonio Martin Ruiz del, see Martin Ruiz del Castillo, Antonio.
 Castillo de San Marcos National Monument, general information, 6977
 Castings :
 heat treatment study of aluminum casting alloy M45, 12892
 iron, current industrial reports, 3169
 nonferrous, current industrial reports, 3169, 4335, 14830
 nonmalleable iron, amend tariff schedules, report, 7697
 plug replaces weld filler as seal, 2632

Castings—Continued

steel casting and foundry work in USSR, 1224

steel, current industrial reports, 3169

castration, hogs, general information, 5637

Castro, Amparo, relief, 12330, 13488 13601

Castro, Renato C., relief, 317, 868

Casualties, Air Force, benefits for dependents and survivors, personal affairs pamphlet, 13259

Caswell, R. S., Fortran programs for calculation of Wigner coefficients for angular momenta, 1526

Catalano, John F., arousal as factor in reminiscence, 9981

Catalog cards:

Library of Congress—

books, authors, 1393, 3601

books, subjects, 2529, 3505

motion pictures and filmstrips, 3506

music and phonorecords, 15459

Cataloging:

Atomic Energy Commission, corporate author entries, 13345

cataloging handbook, H series, 975-976, 2144-40, 3325-27, 7847, 10886, 16457, 17688

cataloging manual M (series), 4669, 6140, 12439, 16458, 17689

descriptive, of Government scientific and technical reports, standard for, 6245

notes for medical catalogers (periodical), 3659

service, bulletin, 3081

supply cataloging—

Federal manual—

international cataloging, 4669

operating procedures, 17689

procedures for FSC classes assigned for integrated management, 6140

format, content, and preparation of Federal supply catalog publications, 12439

technique for measuring image quality, development and evaluation, 7406

Catalogs:

Air Force Academy, Colo., 10208

Armed Forces Information and Education, current information materials, 7374

captioned films for the deaf, 7891

Census Bureau, 3064

census publications, monthly supplement, 3005

Coast Guard Academy, 14879

Commerce Department publications, 1965 supplement, 4454

copyright entries, 967-969, 2141, 10880, 12432-435, 13904, 16451-452, 17682-685

darters, type specimens (Pisces, Percidae, Etheostomatini), 6951

Dürer and his time, exhibition from collection of Print Room, State Museum, Berlin, 10079

Federal assistance programs, 12447

films, 1967, Public Health Service, 17045

films on oceanography, 2770

5,000- and 10,000-year star catalogs, 8683

Government publications, monthly catalog, 3568

GSA stock catalog—

general supplies, 3385, 16606

supplements, 8009, 11066

handtools, 6334

supplements, 4797, 11067, 16608

standard forms, 16607

Homoptera, 12

Industrial College of Armed Forces, 1967-68, 11240

investment information and opportunities, index, 1150, 14208

deletion notices, 3079

supplement notices, 3080

Joint Publications Research Service current translations, addendum, 2425, 15344

Catalogs—Continued

Labor Statistics Bureau publications, 8318, 17898

Library of Congress—

books, subjects, 2529, 3505

motion pictures and filmstrips, 3506

music and phonorecords, 15459

national register of microform masters, 2530

national union catalog, 3601

annual cumulation, 1393

manuscript collections, 2531

register of additional locations, 16838

subject heading, monthly supplement, 3910

medical and veterinary zoology, 15, 13205

meteorological satellite data, television cloud photography—

ESSA 3, 16536

TIROS IX, 6227

TIROS X, 13990

microfilm publications of National Historical Publications Commission, 6936

Military Academy, West Point, 17910

National Bureau of Standards, standard materials, 17033

quarterly insert sheets, 1519, 11582

National Library of Medicine—

annual cumulation, 8533

biweekly listing, 3597

cumulative listing, 11601

16th century printed books, 15598

Naval Academy, Annapolis, 5327, 17061

Naval Oceanographic Office, technical reports and special publications, 11632

outdoor recreation research projects, 7029

packaged disaster hospital materials, 13081

paintings, Alice Pike Barney memorial

parasite and subject catalog, protozoa, 15

programmed instructional material, Navy, 18106

synoptic, Hymenoptera of America north of Mexico, 7267

United States nautical chart catalog—

Alaska and Aleutian Islands, 216

Atlantic and Gulf Coasts, Puerto Rico and Virgin Islands, 4415

Pacific Coast, Hawaii, Guam and Samoa Islands, 7538

water resources research, 6452

zoological names of Portland catalogue, 8546

Catalysis, research, current status in Hungary, 16739

Catalysts:

biological models, USSR study, 14239

metallocomplex catalysis research, USSR study, 1259

noble metals, molybdenum, and tungsten in hydrocarbon synthesis, 12827

Raney nickel technology, 14418

Cataracts, hope through research, 18167

Catastus, Antonio U., relief, 272, 583

Catastus-Rodriguez, Ubaldo G., relief, 10540, 13482, 13740

Catecholamines:

excretion during exposure to oxygen-helium atmosphere, 7366

response to tilting, effects of bed rest and water immersion, 7345

Caterini, Dino J., relief, 7661

Caterpillars, control on cabbage, etc., in South, 15847

Catfish:

channel—

marketable, rearing in ponds, 6356

MS-222 as anesthetic, 8033

response of fingerlings to purified diets, 8042

vitamins essential for growth, 8042

fancy, recipes, 8025

Cathey, Henry M., growing flowering annuals, 15853

Cathode ray tubes, display, computer program samples digital data, 14440

INDEX 1967

Cathodes:

- carbide, evaporation rates of uranium, zirconium, and solid solutions, USSR studies, 6532
- durability tests in mercury electron-bombardment ion thrusters, 12960
- high rate, exploratory investigation, 8596
- hollow, plasma penetration study, 2612
- hot-cathode magnetron ion gauge, 5185
- oxide-cathode durability in mercury electron-bombardment ion thruster, 6867

Cations, *see* Ions.

Cats:

- artificial blood circulation, systemic vascular reactions, USSR study, 11287
- hyperthermic, carotid and femoral artery blood flow, 5710

Cattaraugus Creek:

- harbor, improvement, engineer report—departmental edition, 10950
- document edition, 10505

Cattle:

- beef cattle corrals, form building plan, 4125
- blackleg, cause, control, etc., 14748
- contagious pleuropneumonia still threat, 10190
- dairy—
 - DHIA sire summary list, Ayrshire, Guernsey, Holstein, Jersey, Brown Swiss, Milking Shorthorn, and Red Dane sires, 7245, 17299
 - interstate movement, selected States, 8754
 - diets on native and seeded ranges in ponderosa pine zone of Colorado, 3669
 - fescue foot, what to do about it, 14750
 - grazing, effects on ponderosa pine-bunchgrass range in Colorado, 14764
 - grazing in woods or woods in pasture, 14093
 - growth, effects of protein and energy intake on nitrogen retention, 1728
 - market, testing program, brucellosis eradication activities, 3919
 - on feed, 3082, 5681
 - relationship between timber and cattle production on ponderosa pine range, Wild Bill Range, 16652
 - salmonella reports, salmonellosis review, 9
 - sold for slaughter, selected markets, 3082
 - stocker and feeder, shipments, 3875
 - young malnutrition effect on feed utilization, body size and meat quality, 14765
 - see also* Livestock—Tuberculosis in animals.

Cattle ranges, *see* Range lands.

CATV (community antenna television), *see* Television.

CATV requests filed pursuant to FCC rules, 3269

Caucasus:

- anti-hall expedition, 1965, work, results, 12681
- Lower, man's adaptation to high altitude, USSR study, 14276

Cauliflower, caterpillar control in South, 15847

Caviechi, Richard H., mapping tungsten-reactor rocket engine as guide to operation and control, 9876

Cavity resonators, *see* Resonators.

Cawthorn, Jimmy M., measurement of performance, inlet flow characteristics, and radiated noise for turbojet engine having choked inlet flow, 11499

Cayman Islands, *see* Jamaica.

CBR, *see* Biological warfare—Chemical warfare—Radiological warfare.

CCC, *see* Commodity Credit Corporation.

CCPM pamphlet, 10043

CCR Clearinghouse publications, 8982, 14849-850

CEA-series, 3341, 3874

CEC, *see* Civil Engineer Corps, Navy.

Ceccarelli, Jane M., vested benefits, 5501

Cedar:

- eastern redcedar, effect of gibberellin acid spray on seedlings, 11129
- juniper control by individual tree burning, 2313

Juniperus communis, Gymnosporangium clavariforme in witches' brooms, 8809

redcedar, establishing mixtures in poor oak-hickory forests, 8073

Cedar Rapids, Iowa, population, special census, 10347

Cedros Trench, bathyl and abyssal gammaridean Amphipoda, 17046

Celentano, J.T., acclimatization versus tolerance to stress, annotated bibliography, 17363

Celestial bodies, exploration and use, treaty on principles governing activities of States, analysis and background data, 7791

Celestial mechanics:

- computing orbits, regularization methods, 12857

new methods—

- integral invariants, periodic solutions of 2d type, doubly asymptotic solutions, 11561

Newcomb, Gylde, Lindstedt, and Bohlin methods, 11560

periodic solutions, non-existence of integral invariants, asymptotic solutions, 9921

see also Three-body problem.

Celestial navigation, *see* Navigation.

Cellobiose, 1-C14, preparation and purification, 14087

Cells:

- animal, infecting with ribonucleic acid of tobacco mosaic virus, possibility problem, USSR study, 6486

connector for saturated standard cells, 11590

film, cadmium sulfide, mechanism, 6889

nucleolus, structure and function, international symposium, 7074

structure, virological and microscopic studies, USSR, 6562

sympathetic ganglion cells and acridine orange-DNA complex spectra, USSR study, 12702

tissue and organ culture, 2d decennial review conference, 18172

see also Blood—Cancer—Cytology.

Cells (electrolytic), *see* Electrolytic cells.

Cellular materials, cellular structures as load-bearing structural elements, Hungarian study, 4956

Cellulose, alpha, effect of inorganic salts on pyrolysis determined by dynamic thermogravimetry, 8103

Cement:

- duty-free treatment of limestone for cement—

law, 10483

reports, 9092, 10563

industry, vertical mergers, enforcement

policy, 4799

mineral industry survey, monthly, 3084

minerals yearbook chapter, 5098

performance in concrete, 16528

portland cement concrete pavements, non-destructive testing, evaluation of Dynaflect, 16524

refractory, crucible cast from, impervious to flux and molten metal, 5152

Cemeteries:

American military, overseas, general information, 14787

land in trust for Battle Mountain Indian Colony—

law, 14915

reports, 13827, 14932

see also names of cemeteries, or places

where located.

Cenozoic era:

Enos Creek detachment thrust fault, geology, 2360

JANUARY-DECEMBER

Cenozoic era—Continued

pectinids of Alaska, Iceland, and other northern regions, 11180
 volcanic rocks of Devils Postpile quadrangle, eastern Sierra Nevada, Calif., 14170
 Censorship, press, field manual, 13293
 Census:
 address coding guide and register, general applications, 16028
 agriculture, 1964—
 data-collection forms and procedures, 16041
 final reports, 16041
 preliminary reports, 3085
 State and county statistics, 7490-7510, 8962-65, 10388-398, 12091-92, 13404, 14837-839, 16036-40, 17442
 business, 1963—
 major retail centers, area statistics, bound volume, 1832
 retail trade area statistics, 10339-340
 bound volume, 151
 retail trade subject reports, bound volumes, 5518, 5930-32, 10341
 retail, wholesale, services, bound volumes, announcement and order form, 7453
 special reports, 4270, 5816-17
 wholesale trade subject reports, bound volume, 7459
 computer-based geographic coding, 1970 (paper), 4304
 governments, 1967, preliminary reports, 13361
 manufactures, 1963—
 area statistics, 152-165, 1833-53, 4271, bound volume, 7462
 final reports, announcement and order form, 12033
 general summary, 4273
 industry, statistics, 4272, 8933
 bound volume, 7461
 preliminary reports, 3086
 special reports, 13362, 14817
 subject reports, bound volume, 7460
 subject statistics, 4273-79
 summary and subject statistics, 7460
 methodological reports, 1900-66, list, 10382
 mineral industries, 1963—
 advance reports, 3087
 area statistics, 4280-4300, 5821-46, 7463-64
 announcement and order form, 5808
 bound volume, 12038
 announcement and order form, 13363
 industry statistics, 166-167, 1854, 5847, 7465, 8934, 10342
 bound volume, 13364
 announcement and order form, 13363
 subject statistics, 5848, 7466-71, 8935
 final reports, announcement and order form, 4263
 monograph, 1960, census, 14833
 Nation's census taker, 5889
 needs and plans for 1970 censuses, papers, 4305
 planning 1970 censuses to meet State and local needs (paper), 10383
 plans for 1970 census of population and housing, hearings, 13711
 population, mid-decade census of 1975, etc., reports, 13663, 13686
 population, 1960, final reports, 13402-403, 14835
 population, 1790-1890, price list of microfilm copies of schedules, 1518
 population, supplementary reports, 4301
 population, unemployment, and housing, mid-decade census in 1975, etc., hearings, 10666
 records, your name is somewhere, 10400

Census—Continued

seasonal adjustment program, X-11 variant of census method II, 5902
 small-area data activities, 3878
 statistical briefs from around world (periodical), 3898
 statistics, obtaining for selected group of persons, 8955
 tract memo, 3088
 tract papers GE-40 (series), 4303
 transportation, 1963—
 final volumes, 1855-56, 4302, 7472-73
 passenger transportation survey, 10343
 see also subjects.
 Census Bureau:
 catalog, 3084
 continuing review of retail trade, surveys, announcement and order form, 1884
 data access descriptions—
 automated address coding guide and data retrieval series, 16028
 matching studies series, 8955
 employees, claims incident to service in taking 1960 decennial census, Secretary of Commerce to settle—
 law, 442
 report, 928
 facts about America from recent surveys, 7491
 methodological reports, 1900-66, list, 10382
 Nation's census taker, general information, 5889
 press releases, 3708
 publications, catalog, supplement, 3065
 schedule B, 3849
 schedule P, 10386
 Small-Area Data Advisory Committee, activities, 3878
 special censuses conducted, summaries, 7488-89, 10379, 16018, 16023
 standard industrial classification (SIC) system (address), 181
 technical papers, 5902, 13401, 16035
 working papers, 13413
 Center for International Systems Research, occasional papers, 5525
 Central African Republic:
 labor conditions, 1368
 Peace Corps program, agreement, 7186
 Central America:
 caddis flies, 11611
 east coast, sailing directions, change, 9969
 health information for travel, 13080
 records of Dept. of State, microcopy, pamphlet to accompany internal affairs, 18067
 west coast, sailing directions, 6998, 15625
 Central American Common Market, foreign trade regulations, 17478
 Central Arizona project:
 authorize, etc.
 hearings, 10851
 report, 13826
 Central City quadrangle, Colo., petrology and structure of Precambrian rocks, 12611
 Central Intelligence Agency:
 act of 1949, amend, hearing, 719
 deputy director, nomination of Rufus L. Taylor, hearings, 942
 Central Management Office of Food Services Department, D.C., salaries and operating costs, funds, reports, 2087, 16381
 Central nervous system, see Nervous system.
 Central Radio Propagation Laboratory, see Telecommunication Sciences and Aeronomy Institute.
 Central RR. Co. of New Jersey, payment of loan guaranties, appropriation, 10699
 Central States:
 cost of transporting freight, 11232
 east south central division, annual survey of manufactures, 1965 statistics for States, standard metropolitan statistical areas, and large industrial counties, 17420

INDEX 1967

- Central States—Continued
farm jobs from Gulf to Great Lakes, guide,
6202
north central region—
nonmetropolitan areas, employee earnings and hours, 15447
pulpwood production, etc., 1965, by county, 2337
south, ground-water levels in United States, 16702
Central Valley:
drainage from east, magnitude and frequency of floods, 14177
flood drainage from west, 11188
Central Valley project:
annual report, 14642
history and achievement, 8666
Sacramento Valley irrigation canals, increase capacity—
law, 14909
reports, 7714, 9116, 10735
San Felipe division, construct, etc.—
hearings, 12303
law, 16125
reports, 10700, 14935, 14954
San Felipe division, Interior Dept. report, 5975
Tehama-Colusa Canal, enlargement and realignment—
law, 14909
reports, 7714, 9116, 10735
Centrifugal compressors, *see* Compressors.
Centrifugal fans, *see* Mechanical fans.
Cephalopods, *see* Squids.
Cepollina, Frank J., analog computation in predicting temperature of spacecraft, 6853
Ceramals, thermal conductivity of cermet fuel materials for nuclear reactor application, estimating, 8502
Ceramics:
and insulating materials, properties, USSR study, 16755
coating, intergranular metal phase increases thermal shock resistance, 6811
heat shields for lifting reentry vehicles, study, 15509
hot rolling of oxide-glass compositions, 12820
new metal and metal-ceramic composites, 5194
Ceramists, nuclear science and technology, proceedings of symposium, 12982
CERC, *see* Coastal Engineering Research Center.
Cereals as food, whole grain or enriched, good choice for thrifty family, food value, use, 9342
Cerebral air embolism, 12793
Cerebral cortex:
man and experimental animals in convulsive states, USSR electron microscopic study, 12752
structure, electron microscopic investigation, USSR study, 15348
Cerebral palsy, *see* Palsy.
Cerebrovascular system:
disease epidemiology workshop, papers, 7084
disorders (strokes), 18176
Cerebrum, *see* Brain.
Ceremonies (military), *see* Military ceremonies, honors, and salutes.
Ceremonies (naval), *see* Naval ceremonies, honors, and salutes.
Cesium:
magnesium alloys, intermediate phases between magnesium and Mg_2Cs , 1414
metal, solid-state electromigration of impurities, 5129
Cermets, *see* Ceramals.
Certificates, *see* types of certificates, or subjects involved.
Certification, school certification of full-time attendance for social security purposes, 15743
Certifying your programs aces, 7293
Cesium:
porous ionizers for contact ionization, status, 11540
vapors, expansion and flow characteristics, 2717
volume ion production costs in tenuous plasmas, detailed results, 15577
Cesium isotopes:
Cs-137—
body measurement on human beings, intercomparison of reliability, 17400
distribution in freshwater ponds, 15681
gamma rays, differential energy and angle spectra in water and air, 13526
in irradiated nuclear fuel, separation technique provides rapid quantitative determination, 12845
Cestoda, index-catalog, 13205
Ceylon:
accessions list, Library of Congress American Libraries Book Procurement Center, New Delhi, 11337
agricultural commodities, agreement, 1641
background notes, 1613
economy, basic data, 4439
mineral industry, minerals yearbook chapter, 8344
sailing directions, 17073
U.S. travelers, you can assist U.S. balance of payments, 11887
Chace, Fenner A., Jr., decapod crustaceans from St. Helena Island, South Atlantic, 6945
Chaco Canyon National Monument, general information, 1532
Chad:
background notes, 1614
labor conditions, 1369
Niger boundary, study, 1633
Peace Corps volunteers, agreement, 2925
Chafe, Wallace L., Seneca morphology and dictionary, 13001
Chafers, *see* Beetles.
Chagas' disease, *see* Trypanosomiasis.
Chai-ho Hay Chu, *see* Chu Chai-Ho Hay.
Chain stores, *see* Stores.
Chains, Federal item identification guides for supply cataloging, supplements, 3257
Chains (biochemical), *see* Biochemistry.
Chairs, wood folding, without arms, Federal standard, 6314
Chalcid flies:
alfalfa seed chalcid, procedures for screening and testing alfalfa for resistance, 14733
Eurytoma in America north of Mexico, revision, 8536
Challenge Experimental Forest, broadcast seeding ponderosa pine, progress report, 16660
Challenge of crime in free society, report by President's Commission, 7044
Chamberlayne, Earl C., relief, 12350
Chambers, Harriet C., relief, 4495
Chambers, Washington Irving, papers in Library of Congress, register, 11340
Chamizal tract:
construct border highway along U.S. bank of Rio Grande—
law, 499
reports, 630, 701, 904
Champlin, Jerry B. F., porous permeable rock for nuclear waste disposal, 9778
Chan, Kwok-Long, electron densities and scale heights in topside ionosphere, 2617, 16950
Chance to help, story of SWEAT.
Chancelleries:
foreign sites in D.C., commissioners to acquire—
hearings, 6033
report, 7701
Chancellorsville, Battle of, where hundred thousand fell, 1533
Chanceries, *see* Chancelleries.
Chang, Kyong Hwan, relief, 12346

Chang, Mary T., photography, PACF basic bibliography, 8867

Chang-You Wu, *see* Wu, Chang-You.

Changing the hem in dress or skirt, 7283

Changing the pecking order, 17716

Channel catfish, *see* Catfish.

Channels:

automatic switching device, 9849

communication, monitor assures availability and quality, 8460

convection boiling inside channels, study, 7430-31

heated vertical, low-pressure steam-water flow, final report, 7430

natural, roughness characteristics, 17833

sediment transport in alluvial channels (series), 16695

velocity-head coefficients in open channels, 1133

Channels of technology acquisition in commercial firms and NASA dissemination program, 14375

Chaparral:

communities, moisture-retention capacity of litter, Arizona, 14112

picloram herbicide for killing species, preliminary ratings, 8085

Chaplains:

Naval Reserve, handbook, change, 8580

Navy, public affairs handbook, 13028

VA workshops 1966 (papers), 15817

Chapman, Andrew J., arc-tunnel evaluation of some ablative heat shield materials for X-15-2, 5238

Chappelle, Daniel E., computer program for calculating allowable cut using area-volume check method, 8080

Char, carbon disulfide bench-scale production, 5127

Characidae, South American fishes of subtribe Nannostomina, 8536

Character:

describing airman performance in administrative career ladder by identifying patterns of trait ratings, 11952

rodent ethology, with emphasis on evolution of social behavior, comparative study, 15603

Characteristics and trends of clients rehabilitated, 8784

Characters (graphic symbols):

alphanumeric characters, etc., legibility, reference handbook, 6917

Charcoal, organic loading, NMR method for determining, 14597

Charge storage effects in mylar resulting from electron irradiation, 2610

Charge transfer, halogen-organic complex, primary cells utilizes, 6837

Chariot Project, *see* Project Chariot (nuclear excavation)

Charitable institutions:

tax-exempt foundations, impact—

on economy—

committee prints, 4562, 10679

hearings, print additional copies, reports, 13653, 13820

on small business, hearings, print additional copies, reports, 13653, 13820

Charitable trusts:

tax-exempt, impact on economy—

committee prints, 4562, 10679

hearings, print additional copies, reports, 13653, 13820

Charles M. Russell National Wildlife Range, general information, 2279

Charleston, S.C., harbor, tidal current charts, 14874

Charleston, W. Va., area wage survey, 12771

Charleston Naval Shipyard, employees relief, 315, 566, 846

Charlie (ocean station), *see* Weather stations.

Charlotte, N.C., area wage survey, 14287

Charly, Harry T., beginning Russian 2, study guide, 974

Charnell, Robert L., trade wind zone oceanography pilot study, Townsend Cromwell cruises, etc., 16627-632

Charring ablators, *see* Ablators.

Charring rate of selected woods, transverse to grain, 11132

Chars, chloroform extractions of coals and chars, 12826

Charters:

American Academy in Rome, amend—

law, 16135

report, 14966

Conference of State Societies, amend act, report, 9132

Federal, consideration, authorization, report, 4601

Federal mutual savings banks, legislation, hearings, 15019

Georgetown University, amend to clarify corporate name—

law, 370

report, 4501

Organization of American States, protocol of amendment, text, 10703

United Nations, amendment—

message from the President, 4574

report, 9189

Charts:

color, slide rule-type, predicts reproduced photo tones, 11436

graphic charting techniques for production surveillance, training manual, Defense Supply Agency, 10891

handbook of agricultural charts, 17306

sold by Superintendent of Documents, price list, 7058

strip chart recorder time notation, technique, 12912

system simplifies identification of complex design assemblies, 1458

see also Maps and charts—Organization charts—*also* subjects.

Chase, Helen C., international comparison of perinatal and infant mortality, United States and West European countries, 8659

Chase, William W.:

one-room schoolhouse and how it grew, 10938

schoolhouses for big cities, 15217

Chattahoochee River, and tributaries, pollution of interstate waters, conference, proceedings, 2271

Chattanooga, Tenn., area wage survey, 5062

Chattanooga shale, *see* Shale.

Chaves, Juan F., relief, 10535, 13514, 13762

Chavez, Dennis, statue, acceptance, proceedings, 4570

Chayt, G., NELIAC-N computer program to calculate components of earth's magnetic field, 17083

Che Yim Loh, *see* Loh, Che Yim.

Check valves, *see* Valves.

Checklists:

business service, 3069

State publications, monthly, 3569

see also names of departments, etc., issuing check lists—*also* subjects.

Checks:

and other items, collection, regulation, revision, 14044

check-credit plans, development and implications (remarks), 14037

Government, delivery to addresses outside U.S., regulations, 8771

Cheddar cheese, *see* Cheese.

Chedlak, Antonio B., relief, 309, 593, 867

Cheek, Chandler S.:

laboratory profile of 283 healthy adult males, 7347

transmission characteristics of auto-analyzer colorimeter filters, determination, 7352

Cheek, Rosemary J., inulin and PAH stability in frozen plasma utilizing improved automated inulin technique, 4185

INDEX 1967

Cheese:

- and cheese products plants, sanitary standards, military standard, 9376
- cheddar, how to buy, 13226
- good choice for thrifty family, food value, use, recipes, 9335
- laws and regulations affecting cheese industry, summary, errata, 1680

Chehalis Indians:

- Upper and Lower Tribes, disposition of funds—law, 17559
- reports, 13627, 13830, 16291

Chemical analysis:

- body fluids, apparatus for automobile microanalysis, 2646
- instruments, industrial plant equipment handbook, 4673
- iron compounds, shift in Mossbauer spectroscopy standard, 15588
- procedures for metals, alloys, and other materials of research, 9985
- sedimentary rocks in Colorado, Kansas, Montana, etc., 14172
- semiconductors, status of ultrachemical analysis, 11467
- see also Electrochemical analysis—also names of substances analyzed.

Chemical elements:

- minor in alluvial magnetite from Inner Piedmont belt, N.C. and S.C., 8172
- occurrence of selected minor elements in waters of California, 11186
- see also Transition elements.

Chemical equilibrium, see Equilibrium.

Chemical industries, see Chemicals.

Chemical milling, gage of 6.5% Si-Fe sheet chemically reduced, 2624

Chemical reactions:

- bimolecular, in gas mixture, kinetic theory, 6909
- biochemical reactions, ultraweak luminescence accompanying, 14502
- chemical kinetics, effects on exhaust-nozzle performance, computer program for determining, 15575
- iron blast furnace thermochemical reduction zone, developing mathematical model, 14334
- manganese with silica, 6684
- tungsten-cobalt alloys with oxygen at 1,000° and 1,100°K, 14352
- Chemical reactors, see Reactors (atomic).
- Chemical reference handbook, 15936
- Chemical regeneration of emitter surface increases thermionic diode life, 1445
- Chemical smoke generator units, and smoke operations, 10260

Chemical warfare:

- defense, Army field manual, 1753
- field CBR collective protection, Army technical manual, 6740
- neuropsychic and neuropsychic (psychochemical) agents, comparison, 8249
- protective clothing, technical manual, 15946
- V-type psychochemical warfare agents, present status, Rumanian study, 4990

Chemicals:

- agricultural, registered pesticides, summary of uses, supplement, 8815
- applicator for precision placement of chemicals in soil, 1673
- benzenoid, imports, 17263
- chemical impurity data on artificial graphite, 18040
- chemical plants, investment and operating costs, bibliography, 14328
- chemical safety data sheet, CDS IS series, 9682-83
- chemical sealing of soils, feasibility study, 17849
- chemicals and chemical products, Federal item identification guides for supply cataloging supplements, 3290
- coal, mineral industry survey, 15462

Chemicals—Continued

- compounds, authorized for use under USDA poultry, meat, rabbit, and egg products inspection programs, list, 10878, 16445
- displacement of protons in double-bond, rule for estimating, 12727
- dry fire-extinguishing powders, determining specific surface, permeability and elutriation methods, 11678
- fire retardant, on woody fuels, testing effectiveness developed, 15283
- gas flow in chemical nonequilibrium, numerical integration methods for computing, 15568
- genetic effect when combined with ionizing radiation, mutagenic activity, USSR studies, 2438
- industrial, industry wage survey, 2502
- industry, efficient ways of conducting major repairs, USSR study, 2473
- industry reports, 3092
- inorganic, current industrial reports, 3169, 8939, 10354
- lithographic, military standard, 9377
- marking fish, 4812
- NASA contributions to use of plasma jet technology in chemical processing, 12867
- new industrial, toxicology, USSR study, 11284
- poisonous, properties and uses, USSR study, 12680
- production, all-Union scientific-technical conference for automation, 2454
- products manufacturing machinery, industrial plant equipment handbook, 7851
- quality of surface water in Allegheny River basin, Pa. and N.Y., 8180
- range weeds control, handbook, 4102
- reference handbook, field manual, 15936
- research in atmosphere purification and control on nuclear-powered submarines, annual progress report, 17084
- residues in milk removed from commercial market, indemnity payments to dairy farmers, extend—
law, 16140
reports, 14981, 15088
- role in chemical processing in national economy of Hungary, 1233
- rubber-processing chemicals, production and sales, 15807
- treatment of slash decomposition, laboratory tests fail to confirm acceleration, 8086
- USSR industrial development, translations, chemical industry and machinery, 4016
- weed control in 2-year old walnut planting, 14098
- yield determinations in radiochemistry, 13331
- see also Organic compounds.

Chemistry:

- aluminum in natural water (series), 15313
- analytical—
Bulgaria and abroad, current status and prospects for development, 1231
- instrumentation, survey, 16983
- meeting, Oct. 7-8, 1965, Albuquerque, N. Mex., proceedings, 5766
- applied, Soviet research, 4979
- automated, continuous flow, in-line fractionation and exchange of volatile solvents, 75
- carbon compounds, classification definitions, 18133
- chemical nature of organic matter in waters of major rivers in USSR, 9614
- chemical physics, problems, USSR study, 11257
- clinical, laboratory procedures, 10221
- Communist Chinese abstracts, 3116
- crystal, role of Bulgarian scientists, 1159
- East European abstracts, 3218
- educational activities, USSR studies, 1341

Chemistry—Continued
fertilizers, pesticides, and salts, research,
USSR study, 15350
journal of research, National Bureau of
Standards, 8458
macromolecular, electron spin resonance
research conducted in Hungary, report,
11256
noble gases, 17408
physico-chemical modeling of information
and thought processes, USSR study,
1272
reconnaissance of surface waters quality
of Neches River basin, Tex., 17830
requirements of food additive petitions,
FDA guidelines, 2285
USSR abstracts, 4226
see also Cytochemistry—Geochemistry—
Histochemistry—Organic chemistry—
Physical chemistry.
Chemists:
examination announcement, amendment,
4388
FDA chemist, career information, 11093
pay, national survey, 2507
Chemosterilants:
house fly, materials evaluated at Orlando
and Gainesville, Fla., 14736
to control bark beetles, 14108
Chemotherapy:
cancer abstracts (periodical), 3075
cancer chemotherapy development in So-
viet Union, 17878
cancer chemotherapy reports (periodical),
3076
Chen, Li Tzu (Nako), relief, 774
Chene Bayou:
engineer report—
departmental edition, 15224
document edition, 14930
Chopachet quadrangle, R.I., bedrock geology,
16885
Cherkinsky, Samuil N., honored, USSR arti-
cle, 8252
Chernick, Cedric L., chemistry of noble gases,
17408
Chernock, W. P., UO_2 fuel systems for water
reactor applications, 8902
Cherokee Indians:
Chillico Indian School lands—
convey to, report, 15122
hold in trust, report, 13632
Eastern, enrollment records, pamphlet ac-
companying microcopy, 18072
Oklahoma, Muskogean charm songs, 6973
Cherries:
growing, east of Rocky Mountains, 5628
marketing orders, amend law, 13693
marketing orders for freezing and can-
ning, issuance without approval of pro-
cessors, hearing, 712
production, use, value, by States, 14695
pruning open-grown black cherry, 17803
Chesapeake Bay:
additional bridges and tunnels across or
under, Maryland to construct, etc., re-
port, 16273
fisheries, 1965 annual summary, 9504
storm warning facilities chart, 14720
Chestnut oak, *see* Oak.
Cheyenne County, Colo., Big Sandy Creek
Valley, geology and ground-water re-
sources, 11191
Cheyenne Indians:
convey certain federally owned lands to,
report, 13835
judgment funds, disposition, reports,
15007, 15118
Chi-Spalding method, *see* Spalding-Chi
method.
Chiang, C. L., variance and covariance of
life table functions estimated from sample
of deaths, 8657
Chiarappa, Daniel, analysis and design of
space vehicle flight control systems, 12874
Chivette, Kenneth J., wildlife review, 4068

Chicago, Ill.:
area, sonic-boom measurements during
bomber training operations, 1481
area wage survey, 14293
Board of Trade, futures trading and open
contracts, 3368
fresh fruit and vegetable prices, 10203
Mercantile Exchange, futures trading and
open contracts in eggs and butter, 3369
war on poverty, examination, hearings,
17665
wholesale food distribution facilities, 7278
Chicago, Burlington and Quincy RR., accl-
dent, 11238
Chicago Sanitary and Ship Canal, Willow
Springs and Sag Junction diversions, hy-
draulic model investigation, 10962
Chickens:
broilers, commercial production, etc., 8848,
11875-876
broiler industry, economic study of struc-
ture, practices and problems, 17103
brooding, with infrared lamps, 15887
egg-type hatcheries, costs and economics
of scale, 5649
frying, prices and price spreads in 12 ma-
jor cities, 11943
home flock, 10178
layers and egg production, 10107
monthly egg production, 5684
national improvement plan, ROP candi-
date flocks and list of breeders, etc.,
7243
number raised, 14694
production, disposition, cash receipts, gross
income, 8848, 11875
pullet chicks for broiler hatchery supply
flocks, 3787
tested by official State agencies, monthly
report, 3981
Chicopee, Mass., housing discrimination,
report, 4385
Chicot, Lake:
improvements, engineer report—
departmental edition, 17731
document edition, 17568
Chicot County, Ark., soil survey report,
11813
Childak, Myer R., starting and managing
carwash, 15733
Childers, how to fight them, 4114
Child care, *see* Children.
Child development, *see* Children.
Child health, *see* Children.
Child labor:
bulletin, 8785
Kilgiz cotton and tobacco fields, article
deplores use of children, USSR study,
1172
laws, State, summary, 5047
Child placing:
District of Columbia, foster home care,
provide, report, 16383
foster care, national trends, etc., 10401
Child welfare, *see* Children.
Child welfare institutions:
cost analysis project, analyzing time,
costs, and operations, 7231
public, for delinquent children, personnel
and personnel practices, survey, 4367
residential, in United States, number and
kinds, 13415
Childbearing, *see* Pregnancy.
Childers, Ralph E., manual of procedures
and methods for calculating costs of
desalting and conventional water sys-
tems, 12645
Children:
aid to families with dependent children,
Gary, Ind., 13435
assessing feasibility of mother's employ-
ment and adequacy of child-care plans,
criteria, 13414
beautiful junk, inexpensive materials for
preschool program, 17709

INDEX 1967

Children—Continued

born abroad, U.S. citizenship, count employment of parent by U.S. Government as physical presence requirement—
 law, 474
 reports, 678, 876
 busing school kids to suburbs, 10928
 child abuse reporting laws, tabular view, 7511
 child care services, working mothers and need for, 10144
 child development center, daily program, manual for teachers, 15204
 child nutrition act of 1966—
 closing nutrition gap, 15871
 law, 373
 report, 663
 child nutrition act of 1966, amend, hearings, 9139
 child protection act of 1966—
 hearings, 2112
 law, 466
 child welfare statistics, 1896, 16043
 childhood leukemia, pamphlet for parents, 18157
 children in hospital, planning for, 11758
 children of divorced or separated parents, income tax support test—
 law, 16134
 reports, 2022, 2099, 7693, 15091
 day care and working mother, magnitude of problem on national scale (talk), 11908
 daytime programs, basic goals and common elements, 4363
 deceased veterans, liberalize payments, law, 443
 dependent, aid to families—
 protective payments, report, 9060
 tables on percent of basic needs met, 17196
 dependent, of unemployed parents—
 aid to families, 3988
 Ohio, work registration under Federal State aid, Welfare Administration, GAO review, 11157
 dependent, public assistance, families, money payments, 4751
 dependents of Defense Dept. personnel, overseas air transportation, GAO review, 9545
 deprivation, changing course of familial retardation, 8966
 disadvantaged—
 education, bibliography, 4709
 Head Start child development programs—
 how to apply for, instructions, 6163
 manual of policies and instructions, 16483
 Head Start child development programs—
 physician's role, 6165
 points for parents, 10912
 national conference on education, 1008
 school programs under ESEA grants, 1968 application forms, instructions, 16503
 summer camp, opportunities, expand, hearings, 15024, 15171, 16427, 17601
 summer education, 4720
 District of Columbia, census, amend act, report, 16378
 District of Columbia uniform gifts to minors act, permitting deposit in savings and loan associations, etc., report, 13639
 education in federally affected areas, annual report, 6175
 education, prekindergarten, New York State's program, 13962
 exceptional, research programs, studies in progress, 8967
 facts and figures, 7515

Children—Continued

fair labor standards act provisions, guide, 8785
 Federal aid programs relating to welfare and health, social security amendments of 1967—
 hearings, 15154, 16409
 reports, 14953, 14964
 summary, 15053
 feeding child with a handicap, 13416
 foster care, national trends, etc., 10401
 grouping related to pupil learning, survey of research, 4721
 handicapped—
 education, grant program for preparation of professional personnel, 7897
 manual, 16508
 education, State plan programs, guidelines, 10933
 military medical benefits act of 1966—
 law, 365
 report, 664
 helping parents teach young children, note to agents, 4763
 homemaker service, how it helps children, 7512
 Indian, education, etc., study, authorization, report, 15137
 interdisciplinary journal for professions serving children, 3093, 14840
 lead poisoning, 16042
 mentally retarded, clinical programs, listing, 5905
 mentally retarded or physically handicapped, of members of Armed Forces, use of private facilities, report, 14941
 minors employed in agriculture under fair labor standards act, as amended in 1966, what crew leaders, etc., should know, 10132
 needy families with children in Cleveland, etc., federally assisted aid program, study, 4386
 Nick the cigarette is nobody's friend, 1895
 nursery-kindergarten enrollment under 6, 10937
 nutrition, statutes, compilation, 7262
 old-age beneficiaries of social security, relationship of child beneficiaries, 1603
 pediatrics, Indian Health Division residency program, 1570
 pediatrics, pneumodensography and tachoscillography application, 12748
 pediatrics session, USSR Academy of Medical Sciences, report, 2461
 physical abuse, mandatory reporting by physicians, etc., in D.C., law, 479
 preschool, nutritional status, suggested guidelines for evaluation, 17444
 protection under Federal hazardous substances act, 12552
 research programs, studies in progress, 8967
 Rumanian Socialist Republic, health protection problems, 15361
 school boys and girls, measure before you buy used clothes, 7284
 schoolchildren, transportation in D.C. at reduced fare, increase age, report, 16380
 se habla espanol, help for Spanish-speaking youngsters, 13964
 small, rescue breathing, general information, 5461
 sons and daughters of deceased or disabled veterans, assistance, eligibility, etc., 17285
 special milk program, extend—
 law, 373
 report, 663
 welfare and health programs under social security, amend act, hearings, 7763, 10684
 welfare recommendations, message from the President, 5999

Children—Continued

- who need protection, bibliography, 1892
- who will open this child's eyes, VISTA opportunity, 15208
- widows with children under social security, survey, 2869
- working women and day care needs, consultation, preliminary report, 15820
- your child from 3 to 4, 7514
- see also Child labor—Children's literature—Children's homes—Cripples—Day care of children—Juvenile delinquency.
- Children's Bureau:
 - publication series, 1894-95, 4365-66, 5906, 7512-15, 8966, 10403, 13416, 16042
 - publications, price list, 11713
 - statistical series, 185, 1896, 4367, 12094, 16043
- Children's homes, children's residential institutions in United States, number and kinds, 13415
- Children's literature:
 - children's books, 1966, list, 6622
 - guide to reference sources, 5085
 - Library of Congress, national reference library of children's books, 2532
- Childs, G. E., viscosity and thermal conductivity coefficients of dilute nitrogen and oxygen, 5293
- Chile:
 - Chilean microlepidoptera, description by Emilio Blanchard, 6970
 - establishing business, 1943
 - foreign trade regulations, 17482
 - gazetteer, official standard names, 8152
 - market for U.S. products, 2417
 - mineral industry, minerals yearbook chapter, 12799
- Chillicothe, Ohio, see Federal Reformatory, Chillicothe.
- Chilocco Indian School:
 - Indian School Journal (periodical), 3418
 - lands, hold in trust for Cherokee Nation, reports, 13632, 15122
- Chimes, see Carillons.
- Chimneys and fireplaces, construction, design, etc., 8825
- Chimpanzees:
 - normal immature, under restraint, physiologic values, 7351
 - physiological analysis of so-called foresight in chimpanzee, USSR study, 1306
- Chin Shue Shiu, see Shiu, Chin Shue.
- China:
 - climate, characteristics, classification, etc., 12686
 - coast, sailing directions, change, 15630
 - Communist—
 - claims of U.S. nationals against regime, determination—
 - law, 484
 - report, 897
 - Committee of Fishery Research of West Pacific, 7th plenary conference, 9626
 - cultural revolution as seen by Alberto Moravia, 16736
 - digest, 3113
 - economic profile of mainland China, 5974, 7588
 - print additional copies, report, 10587
 - economy, translations, 3950
 - education in Mao's China, 999
 - geomorphology meeting, Chinese geographical conference, 1965, collected works, 11255
 - great leap backward, economic problems, USSR view, 16780
 - in world economy—
 - hearings, 10493
 - report, 12389
 - law, selected legal sources, guide, 11338

China—Continued

- Communist—Continued
 - mineral industry, minerals yearbook chapter, 5115
- Mao Tse-tung's anti-economism campaign idealizes poverty in China, USSR historian claims, 6582
- Mao's cultural revolution, review by USSR's Literary gazette, 12760
- nuclear weapons progress, impact on U.S. national security, report, 13542
- political and sociological translations, 3951
- Red Guard press information, 14249
- science and technology, translations, 3952
- scientific abstracts, 3114-23
- Sino-Soviet conflict implications, report and hearings, print additional copies, report, 2029
- visit described by USSR journalist, 6583
- foreign relations of U.S., diplomatic papers, China, 1944—
 - departmental edition, 13140
 - document edition, 12192
- loess soil, collected works, 5000
- Republic—
 - atomic energy, cooperation for civil uses, agreement, 2929
 - background notes, 11819
 - loan of additional destroyer, report, 16271
 - loan of vessel, agreement, 15790
 - loan of vessels, extension, agreement, 15791
 - maritime matters, liability during private operation of N.S. Savannah, agreement, 15799
 - trade in cotton textiles, agreement, 2890
- China Sea, see South China Sea.
- Chinaaware, see Tableware.
- Chincoteague National Wildlife Refuge:
 - general information, 9517
 - mammals, list, 2277
- Chinese:
 - artists, traditions, cultural revolution and Red Cross, transcript of conversation by Soviet sculptors L. Ye. Kerbel' and L. D. Muravin, 4948
 - Chinese postgraduate students at Voronezh State University, living and study conditions, 4954
 - cooly trade laws, repeal, report, 7684
 - Chinese gooseberries, tariff classification, amend, reports, 7699, 15105
 - Chinese language:
 - Chinese dictionaries in all languages, list, 7144
 - grammar for component combination in Chinese characters, 5289
 - Chinese Turkistan, journey to Kashgariya by Mikhail Vasil'yevich Pevtsov, 15426
 - Ching-chi yen-chiu (periodical):
 - translations, 8044
 - Chinn, Kenneth S. K.:
 - effects of diet and altitude on body compartments of rats, 10295
 - urinary creatinine excretion as index of fat-free mass composition in rats, 7415
 - Chippewa Indians:
 - judgment funds, disposition—
 - law, 16139
 - reports, 15113, 16237
 - land tenure of Rainy Lake Chippewa, beginning of 19th century, 6974
 - Chiricahua National Monument, Ariz., general information, 14549
 - Chlorophyll, regulating practice of podiatry in D.C., amend act, report, 7691
 - Chiroteuthidae, see Squids.
 - Chisholm, L. J.:
 - report of 51st National Conference on Weights and Measures 11583
 - units of weight and measure, international metric and U.S. customary, 9941

- Chitons and gastropods (Hallotidae through Adorbidae) from western Pacific Islands, 4590
- Chizhevsky, A. L. :
biography, 2480
space biology pioneer, 12737
- Chlorates, candle as concentrated oxygen source, 14410
- Chlorella :
mineral nutrient requirements of *Chlorella sorokiniana* in continuous pure culture, 14779
therophilic, optimal temperature regimes, USSR study, 1265
- Chlorides :
human serum, estimation of change during simulated altitude and aerospace flights, 7341
recovery of manganese as chloride from ores and slags, one-step operation, 11369
- Chlorinated hydrocarbons, *see* Hydrocarbons.
- Chlorination process produces chlorinated aromatic isocyanate in high yield, 6808
- Chlorine :
effect of gamma radiation on reaction of anthracite with fluorine and chlorine, 2585
electrochemical reduction, on carbon in molten lithium chloride-potassium chloride, 17003
- Chloroform, extractions of coals and chars, 12746
- Choate, Grover A., New Mexico's forest resource, 2335
- Chocolate, *see* Confectionery.
- Cholame, Calif., earthquakes of June-Aug. 1966, surface geologic effects, etc., 9574
- Cholera, *see* Hog cholera.
- Cholesterol serum, levels of adults, 8661
- Cholinesterase :
activity, automated method for assay in detection of mild poisoning by pesticides, 13351
activity of digestive trace, influence of tolbutamide, Rumanian study, 1261
inhibition, determined following oral feedings of Zectran to mice, 16657
selective inhibition of nonspecific cholinesterase by some 0,0-diethyl-S-alkylthiophosphates, USSR study, 15402, 16733
- Cholinolytic drugs, effect on biologically dissimilar motor reflexes in monkeys, USSR study, 9641
- Choniotomatidae, *see* Crustaceans.
- Chorioretinal lesions, produced by thermal radiation, study, 10231
- Christal, Raymond E., selecting a harem and other applications of policy-capturing model, 15893
- Christensen, Edward L. :
food stores, 7112
voluntary and cooperative food chains, 10077
- Christensen, J. J., feasibility study on utilization of waste brines from desalination plants, 14196-197
- Christensen, Jay V., midcourse navigation using statistical filter theory, manual theodolite, and symbolic computer control, 6908
- Christmas, 5-cent commemorative postage stamp (poster), 17112
- Christmas Island, *see* Australia.
- Christmas trees :
development of plantation of high quality true fir trees, 2292
tradition and trade, 13216
- Chromates, common names, shipping containers, etc., technical reference, 9735
- Chromatography :
gas, cold trap increases sensitivity, 5206
gas-liquid mass spectrometer, duty-free entry for American Cancer Society, 13775, 14901
- Chromatography :
determination of phenox acid herbicides in water by electron-capture and micro-coulometric gas, 15312
gas, absolute entropies prediction from gas chromatographic retention data, 18111
gas, accurately determines trace hydrazines in aqueous solutions, 15550
gas chromatographic column enables analysis of propellant hydrazines, 2681
gas chromatographic-mass spectrometric methods of analysis, review, 13033
gas, trace contaminants contained in samples from closed environment at 258 mm.hg. analysis, 10234
paper, electronic circuitry used to automate, 12913
thin-layer—
microscope slide loader for laboratory use, 13272
use for cleanup and confirmation of identity of pesticides residues, 13200
use for identification of aircraft engine oil components, 11674
- Chromite, recrystallization of chrome spinel, 9775
- Chromium :
alloy liners for small arms barrels, soundness requirements, military standard, 9378
iron alloys, preparation, 5364
minerals industry survey, monthly, 3094
vanadium-base chromium alloys, properties, 9780
- Chromosomes :
popular description and animal transplant experiment, USSR study, 1307
rearrangement, effect of virus, USSR study, 4963
- Chronic diseases, *see* Diseases.
- Chronology, National Capital Transportation Agency, 6925
- Chrysothamnus :
growing in home garden, 13224
production and sales, etc., 10108
- Chrysler Corporation :
adjustment assistance case pertaining to certain workers, excerpts from Tariff Commission report to Automotive Agreement Adjustment Assistance Board, 10114
- CINDA, improved numerical differencing analyzer program, 15546
- wage chronology, 14285
- Chrysomelids, *see* Beetles.
- Chrysotile, *see* Asbestos.
- Chu Chai-Ho Hay, relief, 12228
- Chugging, analysis, effect of propellant-feed-system coupling and hydraulic parameters, 11491
- Chukchi Sea, euryhaline copepod genus *Eurytemora* in waters, 6943
- Chun Moon Hee (Hi), relief, 826
- Chung, Kil Ja, relief, 9227
- Church, Frank, United Nations at 21, 7810
- Churches, *see* names of churches.
- Chute, Newton E., geology of Norwood quadrangle, Norfolk and Suffolk Counties, Mass., 6389
- CI series, 14650
- Cicadas, periodical cicadas, 17-year locusts, 33
- Cicadellidae, *see* Leafhoppers.
- Cicadelloidea, catalogue, 12
- Cider, apple, making and preserving, 13222
- Cigarettes :
Nick the cigarette is nobody's friend, information for the young, 1895
smoking and health characteristics, statistics, 10067
smoking, chronic bronchitis and emphysema, 5424

Cigars:

Federal excise tax—
structure, report, 4565
treatment of State and local taxes for
computing, report, 9091

Cilia, structural organization and biochemical basis of movement, USSR study, 12696

Cincinnati, Ohio, area wage survey, 12769

CINDA, Chrysler proposed numerical differencing analyzer computer program, 15546

Cini, Marcello, Italian physicist, in North Vietnam tells of culture and civilization as bombs fall, 12699

Circuit breakers, *see* Electric circuit breakers

Circuit Courts of Appeals, uniform civil appellate rules, law, 477

Circuit judges, *see* Judges.

Circuits:
analog, for 2-dimensional distributed elastic structures, 5169

asynchronous, sequential, algorithm for synthesis, 1473

automatic, calibration of flowmeter against liquid-level gage range, 17986

circuit prevents overcharging of secondary cell batteries, 1471

closed circuit TV system monitors welding operations, 12893

collector/collector guard ring balancing circuit eliminates edge effects, 2673

communication, spare Government-owned in Europe, use by Defense Dept., GAO report, 16672

computer program detects transient malfunctions in switching circuits, 9826

control, ensures solar cell operation at maximum power, 9832

digital system provides superregulation of nanosecond amplifier-discriminator circuit, 5147

electronic circuit delivers pulse of high interval stability, 2636

electronic circuitry used to automate paper chromatography, 12913

electronic, handbook, change, 2853

electronic, NASA report, 5193

electronic, provides accurate sensing and control of dc voltage, 8396

embedment and other metallurgical and mechanical characteristics of cross-wire resistance welds, 2698

fluid logic control circuit operates nutator actuator motor, 6759

heater control, provides both fast and proportional control, 11445

heterodyne phase shifter with calibrated phase shift, design and construction, 16977

improved fluid control, operates on low power input, 9827

increase capability of hysteresis synchronous motor, 11440

integrated devices, high reliability screening, 9800

limit, prevents overdriving of operational amplifier, 17925

linear ac electrical and electronic circuits for steady-state conditions, computer programs for numerically analyzing, 16962

linear, analysis program for IBM 1620 Monitor II, etc., 15525

logic circuitry used to automatically test shielded cables, 6819

memory, bipolar current driver, 2627

micropower logic, improved, 14461

monitoring, accurately measures movement of solenoid valve, 2676

multiple meter monitoring, served by single alarm, 17980

one-count memory circuit prevents machine mode interaction, 6697

one-transistor circuit boosts pulse amplitude, 1464

Circuits—Continued

overcurrent protection provided for push-pull amplifier, 16948

point-source light sensor, insensitive to background light, 2637

power, optimum stepped-wave output in 3-phase single-way static inverters, 10008

preregulator feedback circuit utilizes light actuated switch, 2663

printed, terms and definitions, military standard, 16465

process produces accurate registry between circuit board prints, 8476

sensitive bridge circuit measures conductance of low-conductivity electrolyte solutions, 16880

SiC/Si diode trigger circuit provides automatic range switching for log amplifier, 17957

silicon integrated, improving contact bonds, 16965

solid state circuit averages multiple signals and rejects those varying significantly from the average, 15492

solid state, controls direction, speed, and braking of dc motor, 1467

solid state, switches ac load, 1462

strain gage circuitry provides fatigue testing machine with accurate cycle count, 11391

Subminiature deflection circuit operates integrated sweep circuits in TV camera, 11479

suppression techniques evaluated, 1451

switching-type regulator circuit has increased efficiency, 12910

trigger circuit multiplies pulse width modulation, etc., 9828

triple modular redundancy computer operation improved, 9848

univibrator, modified, compensates for output timing errors, 12834

variable-pulse switching circuit controls solenoid-valve actuations, 8456

Circulars, *see* names of departments, etc., issuing circulars.

Circulation of blood, *see* Blood—Pulmonary circulation.

Circulatory system, *see* Cardiovascular system.

Cirrus clouds, *see* Clouds.

Cirugía de emergencia en guerra, manual de la OTAN, 9366

CISR, *see* Center for International Systems Research.

Cities and towns:
airport influence on community economy, 14786

American city, rediscovery (address), 16718

Americans at home, volunteer program of local communities, 10126

aviation demand and airport facility requirement forecasts through 1980 for large air transportation hubs, 15904

building a better America, 16709

building communities with new jobs, 2159

campus and community (address), 15210

challenge of our cities (addresses), 15317

cities are people, too (remarks), 12993

cities in crisis, the challenge of change, 10133

cities on the move, HUD's urban transportation programs help urbanites move into 21st century, 17837

city and the city university (address), 11196

city government finances, 13399

city worker's family budget for moderate living standard, 17894

clean air for your community, 2809, 11722

communities and youth, commitment to opportunity (address), 17339

INDEX 1967

Cities and towns—Continued
communities in action, war on poverty, 3124-25
communities of tomorrow (address), 15834
community action program pamphlet series, 2163-67
community care of mentally ill, annotated bibliography, 1690
community improvement, workable program, guide for citizens advisory committees, 9579
community service and continuing education, newsletter, 3126
comprehensive care services in your community, 5426
consumer expenditures and income 1960-61—
total urban and rural, tables, 2494
urban, tables, 2492
consumer price index, city average, 3143
cooperative ventures in urban America, urban development intergovernmental awards program, 14187
cooperatives and rural-urban balance (remarks), 13220
creative federalism in the city (address), 16707
creek and the city, urban pressures on natural stream, Rock Creek and Washington, D.C., 4913
data book, 1967—
departmental edition, 12041
document edition, 12201
demonstration cities act, model neighborhoods, 6430
demonstration cities and metropolitan development act of 1966—
law, 465
summary, section-by-section analysis, legislative history, and conference report, 725
title 1, program guide, 4909
demonstration city program and architect (address), 2735
differential assessment of farmland, experience in Maryland, 17712
economic environment and urban development (paper), 13929
EDA program for building communities with jobs, 13928
EDA program to help build communities with jobs (address), 17708
facilitating air-truck movements for smaller community (remarks), 17447
Federal beautification program, questions and answers, 4902
Federal-local relationships in model cities program (remarks), 2379
financial institutions and urban rehabilitation (remarks), 16590
first-rate cities, first-rate schools (address), 12464
goals for urban America (address), 17022
health, securing in our urban future, 7091
housing and urban development, Federal programs, progress report, 9309
housing units authorized in metropolitan areas, construction reports, 8937
impact of pollution abatement regulations on municipalities (address), 1580
improving quality of urban life, program guide, 4909
large scale maps for city, construction, and technical planning, requirements, 4981
local-service airline passengers, letter to mayors, 3937
location, etc., of segments of interstate highway system, GAO report, 15299
major metropolitan areas, crime and law enforcement studies, 13060

Cities and towns—Continued
mass transportation amendments of 1966, reports, 620, 628
mass transportation program, emergency provisions, temporary extension—
law, 13522
reports, 12388, 13634
metropolitan America, challenge to federalism, study by Advisory Commission on Intergovernmental Relations, 2048
print additional copies, reports, 10390, 10785
metropolitan areas—
households with UHF and color television sets, current housing report, 15989
occupational earnings and wage trends, 16830
population, provisional estimates, 177, 16013
standard statistical list, with population, 17438
standard statistical, titles and definitions, 10326
statistics, 16032
metropolitan development and budgeting, step toward creative federalism (remarks), 16714
metropolitan planning program relationships to air resource management, 13084
metropolitan population, marital and family characteristics, 10360
microorganisms in 2 types of air masses at 690 meters over a city, 66
model cities, housing and renewal programs (speech), 6436
model cities program, educational dimensions (remarks), 11198
model neighborhoods and demonstration cities (address), 2386
monetary policy and municipal finance (remarks), 9494
motor vehicle abandonment in U.S. urban areas, 7451
Neighborhood Youth Corps in inner-city, 14729
occupational earnings and wage trends in metropolitan areas, 11334, 17899
planning, programming, budgeting system (remarks), 17842
police and community, dynamics of their relationship in changing society, President's Commission on Law Enforcement and Administration of Justice, 13061
poverty, recommendations, message from the President, 7612
President's programs for combatting Ghetto (address), 16094
private enterprise and the city (address), 9580
programs for better cities (address), 16715
rehabilitation agency and community work, source book for professional training, 7222
rural-urban balance (address), 7280
schoolhouse in the city, 13963
schoolhouses for big cities, 15217
science and the city, 6432
small business problems in smaller cities and towns, hearings, 10678
small business problems in urban areas, report, 4512
social requirements for urban design (address), 11209
soil surveys, community planning and resource development, report, 2083
standard metropolitan statistical areas, estimates of population, 14831
teachers, long-term trends in urban compensation, 5080
transit usage, modal split, documentation of methods for estimating, 7100
transportation, improvement (remarks), 9583

Cities and towns—Continued

transportation planning programs, urbanized area, directory, 17175
urban affairs, selected readings, 8200
urban affairs, study, expenses, reports, 4594, 4625
urban America, goals and problems, materials, compilation, 14921
urban and industrial health, environmental health series, 15683-684

urban areas—
beautification aids as provided under housing and urban development act, 6415

Denver, Colo., mineral aggregate industry, impact of urbanization, 6637
urban housing market analysis, 11205

urban planning assistance program, report, 3823
urban research study centers, directory, 14919

urban studies, Cleveland, 4386
wage indexes, long term trend data for selected occupations, 5059

wage trends for occupational groups, 17901
wages and related benefits—

occupational earnings, supplementary practices, 5056, 16814

United States and regional summaries, 14284

zoning in Appalachia, suggestions, 7884
see also Redevelopment (city planning, etc.)—*also* subjects.

Citizens' Advisory Committee on Recreation and Natural Beauty, general information, 8616

Citizens Advisory Council on Status of Women, annual report, 15323

Citizens of United States:
advisory committees for workable program for community improvement, guide, 9579

citizen abroad, tax guide, 2414
customs hints for returning residents, 10882

facts, from recent Census Bureau surveys, 7491
marriage documentary requirements in Italy, agreement, 15767

Citizenship:
becoming a citizen series—

our American way of life, 11211
our Government, 12630
our United States, 12629

Canal Zone, authorize issuance of certificates—

law, 424
report, 923

citizenship and strawberry jam, FDA's protective role in food industry, etc., 15272

Federal textbooks on citizenship, 11211, 12629-632, 14190-191 15320, 17844

periods spent abroad in employment of U.S. Government, etc., to count as physical presence requirement—

law, 474
reports, 678, 876

publications, price lists, 10040, 15672
Puerto Rico, 50th anniversary, report, 9263

see also Naturalization.
Citizenship Day, bulletin, 14189

Citrus fruit:
consumer purchases of fruit, juices, drinks, and other products (periodical), 3145

foreign agriculture circulars, 3345
production, use, value, by States, 1909-10, 1965-65, revised estimates, 5679

quality evaluation of U.S. grown, in European market, 5616

City planners, urban planner, examination announcement, 12115, 13444

City planning, *see* Redevelopment (city planning, etc.)

Civics:

national defense education act—
financial assistance guidelines to strengthen instruction, 13956

institutes for advanced study, handbook for directors, 1003

loans to private nonprofit elementary and secondary schools for equipment and materials, 1007

Civil Aeromedical Research Institute, aeromedical research facilities, acquisition and use, Federal Aviation Administration, Transportation Department, GAO review, 8139

Civil Aeronautics Board:
annual report, 5907

applications, etc., filed with CAB, 3034
appropriations, 1968—

hearings, 9145, 15147
reports, 10600, 15131

career opportunities for—
accountants, economists, and transportation analysts, 17448

attorneys, 16045
functions (remarks), 8974

functions, etc., 8969
history and role in Federal regulatory scheme of air transportation (remarks), 1899

letter to mayor of each city with local airline service (periodical), 3937

little blue book of aeronautical statutes and related material (remarks), 8971

orders, economic E series, 3661
organization (remarks), 7522

press releases, 3709
procedural regulations, 7520

publications, list, 5908
regional air cargo workshop (periodical), 3813

regulations, 188, 3815, 5910, 7521, 12095, 14841, 16048

economic, ER series, 3228
reports, economic and safety enforcement cases, 187, 16046

cumulative index-digest, 8970
responsibilities for economic regulation and promotion of air transportation (remarks), 1900

transfer—
law, 389

report, 906
United States air carriers, list, 5909, 13417

weekly summary of orders and regulations, 4059

Civil affairs:
joint manual, Army field manual, 4209

military assistance to civil authorities, 7383
Civil Air Patrol, air reservist (periodical), 3011

Civil aircraft, *see* Aircraft.
Civil aviation, *see* Aeronautics.

Civil defense, *see* Civilian defense.
Civil Defense Office:

annual report, 7524
annual statistical report, 8976

civil defense management course, self-teaching materials, nuclear weapons effects, 13427

FG series, 4382, 5914-15, 13424, 17450
handbook series, 5916, 13423, 14843,

16050-52, 17451
information bulletin, 3420

labor courses, references, 14845
leaflets, 14047, 16053

miscellaneous publications MP series, 196-198, 1903, 4383, 7527, 8980, 12098, 13426, 14844-845, 16054-55, 17452

publications index, 196, 7527
student manual SM series, 1905, 7528, 14846, 16056-57

technical report, 4384, 5917, 7529-30, 8981, 14847, 16058-60

Civil disturbances, *see* Riots.

INDEX 1967

Civil engineering :
 general, maintenance and operation of electric power generating plants, Air Force manual, 8855
 planning and programming, Air Force manual, 1727
 research of TVA Engineering Laboratory, 17260
 Civil Engineering Institute, Brest. *see* Brest Civil Engineering Institute, USSR.
 Civil engineers :
 Air Force civil engineer (periodical), 3008
 Navy civil engineer (periodical), 3613
 Civil Engineer Corps, Navy :
 100th anniversary—
 booklet, 6993
 men, methods, materials, booklet, 14564
 commemorative medal, law, 487
 Civil liabilities, soldiers' and sailors' civil relief act of 1940 and amendments, compilation, 1994
 Civil procedure :
 civil action venue amendment, law, 423
 judicial and extrajudicial documents in civil or commercial matters, service abroad, convention—
 message from the President, 6060
 report, 7774
 judicial procedure, agreement with Sierra Leone, 7156
 temporary transfer to single district for coordinated or consolidated pretrial proceedings pending in different districts which involve one or more common questions of fact, hearings, 2054
 U.S. Courts of Appeals, uniform civil appellate rules, law, 477
 Civil rights :
 act of 1964—
 compliance officers manual, procedures under title 6, 1906
 cutoff of welfare funds to Alabama, hearings, 6096
 interpretations issued, etc., by Equal Employment Opportunity Commission, digest, 3205
 act of 1966, report, 4498
 act of 1967, message from the President, 12199
 administration of justice in Starr County, Tex., 13433
 Civil rights and housing, hearings, 17641
 civil rights and race relations, seminar, 2879
 civil status, women, 1966 State legislation, highlights, 11910
 employment, administration of justice, and health services in Memphis-Shelby County, Tenn., report, 14851
 housing and urban renewal in Nashville-Davidson County metropolitan area, 12099
 housing, education, etc., hearings before Civil Rights Commission, 10408-409
 human rights conventions, hearings, 7806, 16410
 Interference with, penalties, amend U.S. Code—
 hearings, 17658
 reports, 12283, 14951
 movement, implications for human development, 2879
 nursing homes and title 6 of act of 1964, 1584, 13183
 prose, poetry and black power (address), 9407
 questions and answers, guide, 10913
 school desegregation, guidelines, hearings, 4548
 school desegregation plans, revised statement of policies, 2190
 sex discrimination in employment, Federal and State laws, 17295
 status of Spanish-speaking Americans in Kleberg, Nueces, and San Patricio Counties, Tex., 14848

Civil rights—Continued
 veterans, State laws, digests, 16345
see also Privacy.
 Civil Rights Commission :
 appropriations, 1967, law, 501
 appropriations, 1968—
 hearings, 10632, 16390
 reports, 10616, 16372
 Clearinghouse publications, 8982, 14849-850
 extend—
 hearings, 17658
 report, 13848
 hearings, 10408-409
 statement by Owen B. Kierman, 14853
 press releases, 3710
 racial isolation in public schools, report, 5918
 Civil service :
 adverse action, law and regulations, FPM manual, supplement, 3300
 career opportunities :
 chemists, 11093
 Defense Contract Audit Agency, auditors, 9365
 Defense Dept., professional auditing, 4683
 Federal Power Commission, 4779
 Food and Drug Administration inspectors, 11094
 Immigration and Naturalization Service immigration patrol inspector, 10435
 Internal Revenue Service, 2399
 legal careers, 13447
 medical auxiliaries, etc., 17455
 microbiologists, 11096
 National Aeronautics and Space Administration, 1909, 7536, 11574
 headquarters management intern program, 6729
 personnel, budget, administrative careers in Federal agencies, 10431
 professional nurses in Federal Service, 1917, 17456
 scientific, in Agricultural Research Service, 17323
 scientific, plant pest control, 13229
 Sport Fisheries and Wildlife Bureau—
 fish conservation, 6351
 U.S. game management agent, pilot, 6345
 wildlife conservation, 6352
 Veterans Administration, psychology, 12113
 civil service journal, 3095
 employees, use rather than contractor furnished employees for NASA support services, hearing, 16330
 equal employment opportunity, 1927
 examination announcements—
 accountant and auditor, 199, 201, 4390, 7535, 16074
 accountants, professional, 4393
 administrative staff and technical services, 16068
 agricultural commodity grader, amdt., 202, 8983
 agricultural commodity grader (meat), 16063, 16076
 agricultural extension specialist, discontinuance notice, 10422
 agricultural marketing specialist, 7534
 agricultural research scientists, 12103, 12106
 agricultural statistician, discontinuance notice, 17459
 air traffic control specialists, center, tower, station, 16064
 amendment concerning location of positions, 4400
 amendment concerning superior academic achievement standards, 7531
 amendments, 1916, 4889, 7533, 7538, 8987, 17453
 apprentice (mechanical trades), amdt., 203

Civil service—Continued

examination announcements—continued
audiologist, discontinuance notice, 14861
audiology, speech pathology, professional careers, 13448
auditor, 201, 1908, 5919, 12101, 13438
auditor, accountant, internal revenue agent, 16067, 16069
biological research assistants, discontinuance notice, 16077
biological sciences, 14856
biologists, discontinuance notice, 16077
blue collar helper, various occupations, 12102
bookbinder, amendment, 204
cartographer, amendment, 13439
change of jurisdiction to Interagency Board of U.S. Civil Service Examiners for Washington, D.C., 1913-14, 5924
chemist, mathematician, metallurgist, physicist, amdt., 4388
clerical and office machine operator positions, 16080
communications relay equipment operator, amdt., 203
computer specialists, computer programmer, computer systems analyst, 13441
computer technician, computer operator, 14857
correctional officer, Federal Prison Service, 7541
crop insurance fieldman and supervisor, amdt., 5921
current, 208-210, 1918, 4395-96, 5929, 7542, 8991-92, 10420, 12105, 13442-443, 14858-859, 16072-73, 17457-458
cylinder pressman, 5926
dental auxiliaries, 12104
digital computer systems operator, discontinuance notice, 14862
education specialist and supervisory education specialist, 205, 5931
educational program advisors, 17462
electronics mechanic, amendment, 203
electronics technician, 12109
elementary teachers, Indian affairs Bureau, 1921-22
engineer, non-research positions only, amdt., 205
engineering aid and science assistant, 7545
engineering and physical sciences, 1924, 5933, 17459
engineers, amendment, 10410
entomologist, amendment, 8985
equipment operators and repairmen at journeyman and junior levels, 12102
equipment specialist, aircraft specialties and electronics, amdt., 1911, 14854
farm management supervisor, amdt., 12107
Federal administrative and management positions, discontinuance notice, 10424
Federal service entrance examination, 8993, 16070
fireman, District of Columbia, amendment, 1912
fishery biologist, discontinuance notice, 16077
foreign language specialists, discontinuance notice, 5930
forester, 8954, 16078
freight rate specialist, 206
geologists, amendment, 5920
guard, 4401
health scientist administrators, amdt., 5922
hearing examiner, 12114, 16066
historian, amendment, 10414
home economist, discontinuance notice, 5932
home supervisor, amendment, 12107
hydrologists, amendment, 5920

Civil service—Continued

examination announcements—continued
illustrator, 14863-864
Indian and Alaska native health program, nurses, 10436
Indian health program, nurses, discontinuance notice, 10423
intergroup relations specialists, 1923
junior Federal assistant, 4402, 13446
librarian, Veterans Administration Installations, 10411
librarians, 4404, 10417
maintenance and service workers in Washington, D.C., metropolitan area, 4403, 5925, 7532, 14028
maintenance technician, 7537
maritime safety specialist, 14867
mason (stone and brick), 10415
mediator, National Mediation Board, 14863
medical technologist, 10412
messengers, 8995
meteorologist, 4387
microbiologists, discontinuance notice, 16077
mineral industries, safety officer, 4392
model maker, nonmetal, amdt., 203
nurses, professional, 1920, 5927, 8989, 10416
nursing assistant, 10429
office aid, 4397
office assistant, 16080
operations research analyst, 10430
orthotist, 17455
patent adviser, amendment, 205
patent examiner, 16075, 17461
pathologist, forest and forest products, amdt., 8985
pharmacologists, discontinuance notice, 16077
physiologists, discontinuance notice, 16077
plant quarantine inspector, 211, 12100
plasterer, 10415
policeman, 4407, 13440
printer, monotype keyboard operator, slug machine operator, 4410
printer, monotype keyboard operator, slug machine operator, hand compositor, amdt., 204, 13437
printer proofreader, amdt., 204, 13437
printing crafts, compositor, bookbinder, pressman, machinist lithographer, photoengraver, apprentice group, 4391
program specialist and adviser in education, amdt., 10413
prosthetist, 17455
psychologists, 16071, 12113
public health nutritionist, amdt., 16065
radio announcer, 7537
radio broadcast technician, 7537
recreation resource specialists, 212, 8986, 12110
research forester, and forest products technologist, 4394
research psychologist, amendment, 200
resident youth worker, 12111
restoration technician, 17455
rigger, amendment, 203
safety inspector, 1915
salary supplements, 4408, 5937, 10433
securities investigator, discontinuance notice, 7543
senior level positions in administration, technical services, etc., 8988
social workers, 1907, 5928
speech pathologist, discontinuance notice, 14861
stenographers and typist, 7549, 14855
surveying aid, discontinuance notice, 7544
technical writer and editor positions, 1931
technicians in engineering and physical science, 13445

INDEX 1967

Civil service—Continued
 examination announcements—continued
 telephone operator, 4409, 5923, 13451
 tradesmen and craftsmen at journeyman
 and junior levels, 12102
 trainee, vacation work-study positions,
 in engineering and physical sciences,
 etc., 214, 17460
 transmitter and receiver operator, 7537
 transportation tariff examiner, amdt.,
 1915
 urban planner, 12115, 13444
 veterinarian, amendment, 12100
 veterinarian trainee, summer employ-
 ment, 17463
 warehouse examiner, amendment, 202
 wildlife biologist, discontinuance notice,
 16077
 writing and editing positions, 4411,
 10418
 examinations—
 places where held, 4406, 16082
 sample questions, 213, 1929, 5938, 8996,
 10434, 12112, 13449
 Federal career service at your service,
 7546
 Federal personnel fund raising for volun-
 tary health and welfare agencies, man-
 ual, 3539, 4399
 Federal personnel manual, 3297
 supplements, 3298-3306
 Federal workforce outlook, 12108
 handbook of occupational groups, etc.,
 3389
 handbook X-118, 3790
 handbook X-118B, 3791
 handbook X-118C, 3792
 investigation, authorization and continua-
 tion, report, 4592
 investigation, authorization, report, 6072
 job opportunities, local and regional ex-
 aminations, 1926, 5935, 8994, 10427,
 14866
 laws, Executive orders, rules and regula-
 tions, FPM supplement, 3304
 medical certificates, reviewing and acting
 on, FPM supplement, 3299
 national emergency standby regulations
 and instructions, personnel and man-
 power, FPM supplement, 3306
 occupational groups and series of classes,
 handbook, 16079
 pay structure of Federal civil service,
 16081
 placement of handicapped, summary of in-
 spection findings, 10432
 position-classification standards, 3692
 post-entry training and education for
 professional, administrative employees,
 task force report, 7046
 potential savings available through use of
 civil service employees rather than con-
 tractor-furnished employees for certain
 support services, GAO report, 11150
 processing personnel actions, 3298
 qualification standards—
 classification act positions, 3790
 postal field service, 3791
 wage board positions, 3792
 self and service enrichment through Fed-
 eral training for professional, adminis-
 trative employees, annex to task force
 report, 10030
 supergrade positions—
 appointment solely on merit, etc., hear-
 ings, 16339
 increase quota, hearings, 16339
 working for U.S.A., applying for job, etc.,
 14869
 see also Civil service pensions—Govern-
 ment officials and employees.
 Civil Service Commission:
 ADP Management Training Center, scope,
 faculty, methods, etc., 16062

Civil Service Commission—Continued
 appropriations, 1968—
 amendment, 12323
 hearings, 9145, 15147
 report, 10600, 15131
 better office skills and service, student
 manual, 17454
 civil service retirement system adminis-
 tered by CSC, financing, GAO report,
 9547
 commissioner, nomination of Robert E.
 Hampton, hearing, 7824
 Financial Management and PPBS Train-
 ing Center, background, curriculum,
 etc., 7547
 General Management Training Center, pur-
 pose, etc., 7548
 Interagency training programs, 10426
 Internal auditing activities, GAO review,
 5144
 Investigator, qualifications, etc., 207
 pamphlets, 1927-28, 5936, 10431, 13447,
 14869-870, 16081
 procedures relating to continuing eligibil-
 ity of Federal employees for disability
 retirement annuities under retirement
 system, GAO report, 1102
 report, 1966—
 departmental edition, 7539
 document edition, 7595
 Civil Service Examiners, Interagency Boards
 see Interagency Boards of U.S. Civil
 Service Examiners.
 Civil service pensions:
 annual report, 7540
 classified and postal employees, 1945-66
 increases in retirement annuity, 4556
 firemen, include within retirement pro-
 visions of U.S. Code relating to hazard-
 ous occupations, hearing, 16429
 laws, compilation, 1981
 rates etc., planning for the later years,
 18207
 retirement and disability fund, 1965, re-
 port, 4489
 retirement benefits, FPM manual supple-
 ment, 3301
 retirement credits, transfer to social se-
 curity system, to close gaps in protec-
 tions, amend U.S. Code, hearings, 10672
 retirement financing, recommendations,
 15046
 retirement law, amend to liberalize ben-
 efits for referees in bankruptcy, hearing,
 16429
 retirement, provisions of title 5, United
 States Code, 13880
 retirement system—
 continuing eligibility of Federal em-
 ployees for disability retirement an-
 nuities, GAO review, 1102
 Federal employee facts, 4398
 financing, GAO report, 9547
 staff retirement systems, appendix to re-
 port, 10692
 survivors of reemployed annuitants, com-
 puting annuities—
 hearing, 749
 report, 10745
 your retirement system, questions and
 answers concerning Federal civil service
 retirement law, 14870
 Civil service retirement and disability fund,
 see Civil service pensions.
 Civil War, 1861-65:
 naval chronology, pt. 6, special studies
 and cumulative index, 1541
 service records, pamphlet to accompany
 microcopy, Utah Territory, Union Voi-
 unteers, 18073
 Union provost marshals' papers, pamphlet
 to accompany microcopy relating to in-
 dividuals civilians, 18061
 United States Marines at Harper's Ferry,
 historical reference pamphlet, 12784

Civil War Centennial Commission, audit, Sept. 7, 1957-May 1, 1966, GAO report, 14148
 Civil works, see Public works.
 Civilian Advisory Panel on Military Manpower Procurement, report, 6028
 Civilian defense:
 activities, appropriations, 1968—
 hearings, 9145
 reports, 10600, 15131
 adult education course, personal and family survival—
 announcement, 16507
 student manual, 1905
 teachers manual, changes, 7016, 12470
 Civil Defense Office information bulletin, 3420
 civil emergency planning, agreement with Canada, 17249
 community and family service, how organizations can advance program, 16050
 community development and civil defense, 16059
 community involvement, suggestions by American National Red Cross, 16051
 congressional testimony, 90th Congress, 1st session, excerpts, 12098
 damage effects estimation techniques, 13426
 emergency health care, reference guide for students of medical self-help training course, 4378
 Federal buildings, change, 14613
 Federal civil defense guide, 190-195, 4379-81, 5912-13, 8977-79, 10405-406, 13421-423, 14842
 Federal stockpile inventory, report, 2986
 Federal surplus personal property, how to acquire, 12621
 FG series, 4382, 5914-15, 13424, 17450
 if disaster strikes and there is no doctor, medical self-help training, course, announcement, 11738
 labor participation, 197
 labor union members, how are you affected? 4383
 labor's role in State, county, and local civil defense, labor leaders briefing guide, 16055
 labor's role, training course, instructor's guide, 198
 maintenance of shelters, USSR study, 12756
 management textbook, 16056
 meetings that move, handbook, 14843, 16052, 17451
 memorandum to industry, movie, announcement, 10407
 national and State, policy resolutions of AFL-CIO, 1903, 17452
 national fallout shelter survey program, joint support group, phase I survey instructions, 15226
 packaged disaster hospital—
 laboratory section, 2823
 materials, catalog and guide for distribution, 13081
 planning, nuclear radiation shielding, analysis and design principles, 8384
 program, status, 8980
 programmed orientation to civil defense—
 governmental responsibilities for civil defense, 13422
 nuclear weapons effects, 13429
 panel book to accompany text, 14846
 protection against what? 13428
 shelters, 13430
 warning, emergency operations, and support programs, 13431
 publications, price lists, 1564, 17136
 radiological defense, planning and operations guide, student manual, 7528
 rural, Federal Extension Service program, 3463
 State and regional defense airlift planning, change, 9447

Civilian defense—Continued
 State directors, lists, 1904, 14844
 State salary ranges, 4898, 11194
 student manual SM series, 1905, 7258, 14846, 16056-57
 USSR study, 1248
 waterworks operations, civil defense aspects, 4382
 Civilian employees, see Army—Government officials and employees.
 Civilian nuclear power, 1962 report to the President, 1967 supplement, 7436
 Civilians:
 aides to Secretary of Army, 13th national conference, summary, 15944
 civilian personnel pamphlets, 5723-24
 DSA career program for automatic data processing, 13910
 Navy, manpower management (periodical), 8602
 travel and transportation, temporary duty, general information, etc., handbook, 6143
 Union provost marshals' papers, pamphlet to accompany microcopy, relating to individuals, 18061
 Cladding, ductile, effect on bend transition temperature of wrought tungsten, 17008
 Claims:
 ammunition shipments, indemnification for losses arising from, agreement with Great Britain, 7184
 arising from correction of military records, provide statute of limitations on payments, report, 2016
 bankruptcy, creditors, filing, amend act—
 hearing, 16420
 report, 9094
 Census Bureau employees, arising out of taking 1960 decennial census, Secretary of Commerce to settle—
 law, 442
 report, 928
 Coast Guard, settlement incident to non-combat activity while operating as service in Transportation Dept., increase settlement authority, amend U.S. Code, report, 17571
 damages to property, etc., proposed supplemental appropriation to pay, 9077, 10697
 District of Columbia employees personal property claims, settlement, report, 10610
 District of Columbia escheat cases, settlement by commissioners, remove dollar limit—
 law, 12175
 reports, 7688, 12380
 Federal agencies, general procedures, GAO guidance manual, 8128-29
 Gut Dam, agreement with Canada, 8725
 international claims settlement act of 1949, amend—
 hearings, 732, 12300
 law, 484
 report, 897
 international claims settlement act of 1949, as amended—
 relative to claims against Yugoslavia, excerpts, 8050
 text of title 5, 8051
 livestock, packers and stockyards act provides assistance, 1712, 15869
 medical insurance, under medicare, methods of payment, 7127
 military, settlement, and appeal procedure, amend U.S. Code, report, 12279
 ordnance plant explosion in Bowie County, Tex., settlement—
 law, 12158
 reports, 637, 801
 postwar economic assistance claim, settlement, agreement with Federal Republic of Germany, 11849

INDEX 1967

- Claims—Continued
 United States nationals—
 against Chinese Communist regime, de-
 termination—
 law, 484
 report, 897
 against Poland, Yugoslavia, hearing,
 732
 agreement with Yugoslavia, text, regu-
 lations, etc., 8050
 veterans, settlement, agreement with
 Philippines, 17234
 war claims act, administration, investi-
 gation, report on findings, 13831
see also Unemployment insurance—*also*
 names of claimants.
- Clamps:
 cable clamp bolt fixture facilitates assem-
 bly in close quarters, 15533
 Marmon, tool facilitates installation, 9860
 provide efficient connection for high-
 density currents, 11469
 system for Pharos 2-MJ capacity bank,
 11671
- Clams, certified shippers, list, 3089
- Clarinda, Iowa:
 airport, permit leasing of portion of prop-
 erty—
 law, 376
 report, 680
- Clarinet, sonata for 2 clarinets, student com-
 posers take over, 7911
- Clark, Austin H., monograph of existing cri-
 noids, suborders Oligophrenta and Ma-
 crophrenta, 14528
- Clark, F. Bryan, planting black walnut for
 timber, 32
- Clark, George:
 histochemistry of Well stain on liver,
 10320
 problems in aerial application, endrin and
 carbon tetrachloride, etc., 4282
- Clark, Joseph S.:
 East of the Elbe, 6104
 war or peace in Middle East, 10837
- Clark, Leonard V., free jet impingement nor-
 mal to curved surface in vacuum, 9897
- Clark, R. T., experimental cassegrain-fed
 monopulse antenna system, 11396
- Clark, Ramsey, nomination, hearing 9324
- Clark, S. K., pressure distribution curves
 applicable to pneumatic tires, 11401
- Clark, William B., naval documents of Amer-
 ican Revolution, 2773
- Clark, Willie E., index to conferences relat-
 ing to nuclear science, 127
- Clarke, J. F. Gates, Chilean microlepidoptera,
 6970
- Clarke, James W., geophysical abstracts,
 3376
- Clarke, Joan, labor law and practice in Leba-
 non, 2495
- Clarkson, J., British work on behaviour of
 warship structures, 5488
- Clary, Warren P., differences in herbage-
 timber relationships between thinned and
 unthinned ponderosa pine stands, 2816
- Classification:
 classification bulletins, Patent Office, 2785,
 5368
 classification definition series, 5369,
 8604-5, 11684, 13043-46, 17104-108,
 18117-134
 Government publications available to de-
 pository libraries, list of classes, 17131
 Library of Congress—
 additions and changes, quarterly list,
 3464
 class G, geography, etc., 5086
 class L, education, 5087
 class P, subclass PQ, French literature,
 2527
 class Q, science, 9749
 class R, medicine, 5088
- Classification—Continued
 Navy, enlisted personnel manual, 5339,
 14586
 Navy officer, manual—
 changes, 2777, 18108
 cross reference index, 7014
 postal field service, reclassify certain pos-
 tions, hearings, 12308
 U.S. foreign trade statistics, classifications
 and cross-classifications, 17440
 United States Senators, 762
see also Civil service—Government officials
 and employees—*also* names of sub-
 stances, objects, etc., classified.—
- Classrooms:
 complex, with programmed instructions,
 USSR study, 9661
 National Teacher Corps as missionaries,
 6188
- Claude cycle, *see* Refrigeration and refrig-
 erating machinery.
- Clay, Eleanor W., bimonthly list of publica-
 tions and motion pictures, 3058
- Clay:
 construction products, current industrial
 reports, 3169, 12068, 14827
 deposits, northeastern Alabama, 2357
 lime-soda sinter process for producing
 alumina from, evaluation of method,
 9779
 minerals yearbook chapter, 2534
see also Montmorillonite.
- Clayton act, *see* Monopolies.
- Clean air act, *see* Air pollution.
- Clean rooms:
 air sampler, counts, categorizes, and re-
 cords particle size, 14409
 bacteriology of, 17937
- Clean water restoration act, *see* Water pollu-
 tion.
- Cleaning:
 and liquid contact with solids, classifica-
 tion definitions, 18124
 equipment and supplies, Federal item
 identification guides for supply cat-
 aloging, supplements, 3290
 liquid oxygen during cleaned by falling
 film method, 16947
see also Dry cleaning.
- Cleaning compounds, *see* Soap.
- Clear Creek County, Colo., geology and ore
 deposits of Lawson-Dumont-Fall River dis-
 trict, 16683
- Clear Lake National Wildlife Refuge, birds,
 list, 15262
- Clear Lake Springs, Millard County, Utah,
 causes of fluctuations in rate of discharge,
 12618
- Clearing of land, safety industry, instructor
 outline, site clearing, 17887
see also Reclamation of land.
- Clearinghouse for Federal Scientific and
 Technical Information:
 fast announcement (periodical), 3266
 fast announcement service of U.S. gov-
 ernment research and development
 reports, 10437
 press releases, 3711
 R&D reports, technical information that
 may help your company, 5294, 14520
 scientific documentation sponsored by
 NFS, price list, 6916
- Clearinghouse for Research in Child Life,
 8967
- Clearwing moths, clearwing borer in red
 oaks, 2326
- Cleaver, Thayer, effect of layout, equipment,
 and routine on time and travel required
 for milking cows, 4151
- Clem, Harold J., maintenance management
 in Defense Dept., 17858
- Clement, Wendell E., consumer response to
 various levels of advertising for fluid
 milk, 17322

Clergy:
 hospital ministry, medico-moral ethics (papers), 15817
 social security for clergymen, explanation, 11801
Clerical workers, see Clerks.
Clerk typists, see Typists.
Clerks:
 better office skills and service, student manual, 17454
 examination announcements, 7549, 16080
 office aid, examination announcement, 4397
Cleveland, Ohio:
 area wage survey, 5066
 children in need, federally assisted aid program to families, study, 4386
 selected neighborhoods, population characteristics, 4351
 urban studies, 4386
Clevenson, Sherman A., fatigue life under random loading for several power spectral shapes, 17013
Click beetles, see Beetles.
Cliff, Rodger, A., application of stored-program computer to small scientific spacecraft, 11533
Clifford, J. E., water-vapor electrolysis cell with phosphoric acid electrolyte, 12858
Clifton, N.J., area wage survey, 15438
Climate:
 and surface water features of Sâhl Sûsah area, Tunisia, 11189
 Arizona, 4746
 changes, and agricultural production, Communist China study, 9673
 China, characteristics, classification, etc., 12686
 climatic maps of United States, 13989
 climatography of United States, climates of States, 4746, 9425-26, 12478, 16530-531
 climatological aspects of air pollution in West Virginia, 6219
 climatological data—
 by States, etc., 3096
 for Antarctic stations, 6217
 national summary, 3097
 climatological probability of aircraft icing, 7318
 climatology—
 Northern Hemisphere, introduction, 14793
 radioactive fallout in northern regions, 14794
 Iowa, 9425
 local climatological data, 3522
 Michigan, 16530
 monthly data for world, 3570
 New Jersey, 9426
 Oregon, 16531
 subtropical, seasonal changes among endocrine-metabolic indices of men, 7358
 Vietnam, Republic, annotated bibliography, 16539
 WB/BC series, 16539
Cline, A. J., soil survey of Delta-Montrose area, Colo., 15747
Clinical Center, National Institutes of Health:
 current clinical studies and patient referral procedures, 10044
 normal volunteer patient program, handbook, 7067
 patient admission procedures, 13069
 people with a purpose, normal volunteer patients, 7081
Clinical medicine, see Medicine.
Clinical medicine (USSR periodical):
 translations, 1194, 1200, 1314, 1347, 4973-74
Clinical pharmacology, see Pharmacology.
Clinical psychologists, see Psychologists.

Clinics:
 psychiatric facilities usage for community mental health programs and related research, 5465
 psychiatric outpatient services, State and total U.S.—
 annual statistical reports, 1586, 14633
 special statistical report, older adult patient, 5453
Turkmen SSR, quality and number of medical institutions increase steadily, 14224
Veterans Administration career information—
 manual arts therapists, 14713
 occupational therapists, 14712
 social workers, 14711
Clinton hematitic sandstone deposits, Butt Mountain area, Va., 12819
Clocks and watches:
 dutiable status of imports from insular possessions, amend tariff schedules—
 law, 509
 report, 911
 synchronizing remotely-located clocks, 8422, 14373
 see also Atomic clocks.
Clones, cacao, collection of Agriculture Dept., description, 10148
Close, Kathryn, children, interdisciplinary journal for professions serving children, 3093, 14840
Closed collision paths in plane circular restricted three-body problem, 9922
Closed life-support system, etc., 15515
Closing nutrition gap, 15871
Clostridium:
 agar concentration in counting colonies, 17346
 clostridium bacteria toxins effect on hemolytic and leithinase activity, USSR study, 15388
 clostridium perfringens, toxins, microbiological studies, 11290
 recovery from human feces, development of method, 4182
Closures:
 for containers, current industrial reports, 3169, 13388
 self-sealing closure enables access to several fluid containers, 14417
Cloth, see Textiles—also names of textiles.
Clothing:
 and individual equipment, Federal item identification guides for supply cataloging, supplements, 3292
 apparel survey, 1965, current industrial reports, 8938, 10352, 12067
 field clothing exchange operations, Army technical manual, 8885
 fix new clothes to make them last longer, 7287
 4-H projects, abilities of girls 9-13, 48
 men's apparel, current industrial reports, 3169
 pneumatic insulation suit for radioactivity protection, USSR study, 14231
 programs, pattern alteration, guide for leaders, 15856
 protective—
 chemical operations, technical manual, 15946
 motorcycling fun and personal protection, 17174
 passenger smoke hood, aviation medical report, 14812
 simplified construction, 14743, 17314
 urban families, expenditures per member by sex and age, 14303
 used clothes for your school boy or girl, measure before you buy, 7284
 water cooled, bio-thermal responses to varied work program in men kept thermally neutral, 8423

INDEX 1967

Clothing—Continued

women's apparel, current industrial reports, 3169
see also names or types of clothing.

Clotting, *see* Blood.

Clots, *see* Blood.

Cloud, Preston E., jr.:

bauxite deposits of Anniston, Fort Payne and Ashville areas, northeast Alabama, 2356

geology and bauxite deposits of Rock Run and Goshen Valley areas, northeast Alabama, 9561

Cloud, William K., Parkfield, Calif. earthquake of June 27, 1966, preliminary engineering seismological report, 1934

Clouds:

cover and out-going radiation, investigation with satellite Kosmos-122, USSR study, 2443

droplet camera, 4202

maps, automatic compilation of Setun' electronic computer using weather satellite data, USSR study, 12600

measurements using aircraft, time-lapse photography, 10967

Pre-Gondola, lidar observations, final report, 17397

noctilucent, USSR study, 1332

research, use of meteorological satellites, USSR study, 12744

television photography, meteorological satellite data, catalog—
 ESSA 3, 16536
 TIROS IX, 6227
 TIROS X, 13990

upper troposphere motions as revealed by satellite-observed cirrus formations, 9430

Clouds, Magellanic, *see* Magellanic Clouds.

Cloutier, Hardy, soil survey of Chicot County, Ark., 11813

Clover, *see* Crimson clover.

Clover-Rush Run oilfield, William Kaufman lease, reservoir study, 14347

Cluj, Rumania, radioactivity of vegetation, studies, 1299

Clutches (machinery):
 and power-stop control, classification definitions, 18132

Clutter, *see* Radar.

Clynes, Susan J., relief, 340, 834

Coagulation, *see* Blood.

Coal:

Alaska, resources, 8157

analyses of tippie and delivered samples, 8375

analyzing and testing coal and coke, methods, 14323

anthracite—
 carbon dioxide adsorption, surface area studies, 1412

gamma radiation effect on reaction with fluorine and chlorine, 2585

Pennsylvania—
 distribution 1965-66 coal year, 5102
 from Bottom Red Ash bed, northern field, preparation characteristics, 12830

mineral industry surveys, weekly, 3679

minerals yearbook chapter, 2535

pressure drop across fixed beds of briquets, comparison with blast furnace materials, 11375

bituminous and lignite—
 distribution, quarterly, 3060
 minerals yearbook chapter, 5099
 mining, census of minerals, 1963, industry statistics, 167
 bituminous resources of Texas, 8158

Coal—Continued

BM-AGA carbonization yields from 13- and 18-inch-diameter retorts, correlation, 2575

carbonization—
 conditions and coal properties effect on coke size and strength, 16866

yields and analyses of tars and light oils, 16850

carbonizing properties—
 Fayette and Greenbrier Counties, W. Va., 2576

Logan and Mingo Counties, W. Va., 5130

chemicals—
 mineral industry survey, 3103, 15462
 minerals yearbook chapter, 5100

chloroform extractions of coals and chars, 12828

coal and modified coals, use as adsorbents for removing organic contaminants from waste waters, 2588

coal-fired turbine, Mines Bureau research project, test of new blade design, 9772

cost competitiveness for energy sources of future (remarks), 6439

dewatering anthracite slurry, 15478

distribution of minor elements in western and southwestern regions of Interior coal province, 8153

electrochemical reduction, 16862

fly ash, extraction of germanium and gallium, 9789

foreign trade reports, 3998, 10399

industry, nuclear power briefing, 8904

international trade, monthly inventory, 3433

liquefaction (remarks), 8907

minor elements in American coals (series), 8153

optical properties, 16849

preparation characteristics—
 Randolph County, W. Va., 2578

Upshur County, W. Va., 14358

products from high-temperature irradiation and carbonization of coal, comparison, 2572

report, weekly, 4053

resources—
 Cape Lisburne-Colville River region, Alaska, 15306

southwestern Utah, potential for use in steam-electric power-generation plants, 8341

spectrometry advances, absorption, 16848

thickness of bituminous coal and lignite seams mined, 14327

use with ammonia, for hydrogen cyanide production, 14349

Utah—
 coking properties, 11377

low-temperature carbonization product yields, estimation, 14345

see also Ashes.

Coal dust:
 and methane mixtures, equivalences and lower ignition limits, 9782

incendivity of hot gases to methane and coal dust, reduction by sodium chloride and sodium nitrate, 11383

Coal fields, *see* Coal.

Coal-fired water pump, 1408

Coal lands, strip-mining in eastern Kentucky, land disturbances, 8077, 17801

Coal Mine Safety Board of Review, member, nomination of Elzie H. Wooten, hearing, 6123

Coal mines and mining:
 bituminous coal mines, wage chronology, 16820

census of mineral industries, 1962, industry statistics, 166

Federal coal mine safety act, as amended, title 1 and title 2, text, 16852

injuries and employment, monthly report, 3098

Coal mines and mining—Continued

longwall mining—
in bituminous coal mines with planers, shearer-loaders, and self-advancing hydraulic roof supports, 6638
techniques, demonstration mine, Windber, Pa., feasibility study and supplement, 7865
nitrogen dioxide in fumes from explosives, rapid colorimetric method for field determination, 14338
pneumatic transportation of solids, symposium, 2542
pressure changes in pillars during extraction, 12829
stress distributions in burst prone coal pillars, 12824
USSR, poor safety measures and work methods, 2478
see also Coal lands—Mine drainage.
Coal Research Office:
annual report, 10440
appropriations, 1968, hearings, 7734
press releases, 3712
Coal tar, *see* Tar.
Coal Week, National, *see* National Coal Week.
Coalfields, *see* Coal.
Coast and Geodetic Survey:
aeronautical charts and related publications, catalog, 5939, 8998, 16084
magnetograms MHV series, 7552
publications, 4412, 12117, 14873, 17466
special publications, 1935
technical bulletins, 5946
uniformed services, joint travel regulations, 3455
Coast facilities, Navy design manual, changes, 2765
Coast Guard:
aids to navigation services, improve, etc.—
hearings, 745
law, 382
reports, 669, 4585
appropriations for vessels, authorization—
hearings, 7752, 10827
law, 13524
reports, 10556, 12378
auxiliary membership qualification guide, 13452
career opportunities, engineering team, not for ordinary engineer, 218
claims settlement incident to noncombat activity while operating as service in Transportation Dept., increase settlement authority, amend U.S. Code, report, 17571
construction of shore and offshore establishments, appropriate authorization, report, 12378
court martial cases, report, 7844
electric engineering regulations, 9001
engineer's digest (periodical), 17468
enlisted ratings qualifications manual, 14876
equipment lists, 9002
group life insurance program, annual report, 8778
legislation, hearings, 745
manual, national search and rescue, amendment, 12124
marine investigation regulations, etc., 10443
need for improvement in Coast Guard Reserve training program, GAO report, 14153
nominations, hearings, 6094
oceanographic reports, 10444-445
officers and cadets, register, 7560
official recreational boating guide, 219, 4419
ordnance manual, amdt., 4417
organizational manual, 4418
recreational boating safety, responsibilities, hearing, 17603
regulations, 222

Coast Guard—Continued

retirement age requirements, amend act rel. to former Lighthouse Service employees, report, 12251
rules and regulations for numbering undocumented vessels and reporting of boating accidents, 9007
terminal facilities guide, Defense Supply Agency handbook, 17690
transfer—
law, 380
report, 906
United States Code, title 14, amend—
law, 17537
reports, 7706, 15089
see also Pay, allowances, etc.
Coast Guard Academy, New London:
cadet profile, 16088
candidates for appointment as cadets, 1967-68, bulletin of information, 9008
catalogue of courses, 14879
Coast Guard Auxiliary, motorboat examination program, courtesy examiners handbook, 5947
Coast Guard Officer Candidate School, opportunity for college seniors or graduates, 217
Coast Guard Reserve:
Coast Guard reservist (periodical), 3099, 12122
INACDUTRA afloat training guide, 14878
keep your civilian job but enjoy 2d career as commissioned officer, 10442
nomination, hearings, 6094
register of officers, 7559
training program, need for improvement, GAO report, 14153
Coast Guard stations:
construction of shore and offshore establishments, appropriation authorization—
hearings, 7752, 10827
law, 13524
report, 10556
Coast Guard vessels, *see* Ships.
Coast pilots, United States coast pilot, 4414, 5942-45, 7553-54, 7556-57, 17467
Coastal Engineering Research Center:
bulletin and summary report of research progress, 2207
miscellaneous papers, 10952, 13975
reprint R. (series), 10953, 16519-521
technical memorandums, 7924-25, 10954, 13976, 16522-523
technical report, 1022
wave record program, 10951
Coastal Plains, *see* Atlantic States.
Coastal Plains Regional Commission, economic development plans and programs for Coastal Plains region (remarks), 16090
Coastal processes and beach erosion, 10953
Coastal warning facilities charts:
Canadian border to Eureka, Calif. and Alaska, 14717
Cape Hatteras, N.C. to Brunswick, Ga., 14718
eastern Florida, 8790
Eastport, Maine to Montauk Point, N.Y., 14719
Eureka to Point Conception, Calif., 11901
Hawaiian Islands, 11902
Manasquan, N.J. to Cape Hatteras, N.C. and Chesapeake Bay, 14720
Montauk Point, N.Y. to Manasquan, N.J., 14721
Morgan City, La. to Brownsville, Tex., 11903
Point Conception, Calif. to Mexican border, 11904
Puerto Rico and Virgin Islands, 11905
Coasts, coastal engineering, compilation of longshore current data, 10952
see also Littoral.
Coated surfaces, *see* Surfaces.

INDEX 1967

Coating machinery:
 coating implements with material supply, classification definitions, 18134
 mechanism facilitates coating inner surfaces of metal cylinders, 8478

Coating materials:
 abraded cadmium-plated cable connectors repaired by conversion coating, 6746
 black, simulated space environment effects on thermal radiation characteristics, 16980
 clear coatings on softwood surfaces, irradiated and weathered, microscopic observations, 14123
 coating implements with material supply, classification definitions, 18134
 compositions, classification definitions, 8605
 fire-retardant undercoat on burning characteristics of combustible topcoat, 13036
 fused-fluoride lubricant additions, for reduction of low-temperature friction, 5265
 high temperature coating of metals, USSR study, 9677
 magnesium-lithium alloys, coating protects against corrosion, 11477
 metal flame spray coating protects electrical cables in extreme environment, 17931
 pigmented, highly reflecting coatings, light scattering investigations, summary, 14392
 protective coating for magnesium alloys, 10013
 sprayable birefringent coating enables strain measurements on large surfaces, 2680
see also Ceramics—Primers (paint).

Coats, George I., radionuclide standardization, bibliography, 15682

Coaxial cables, *see* Electric cables.

Coaxial plasma gun, performance, viscous drag effect, calculation, 5267

Cobalt:
 alloy liners for small arms barrels, soundness requirements, military standard, 9378
 ions, use in activation of ZnS crystals, bleaching effect under ruby laser pulses, 9926
 iron alloy, magnetically soft, high-temperature, investigation, 1500
 iron alloy with superior high temperature magnetic properties, 5209
 mineral industry survey—
 monthly, 3100
 quarterly, 3101
 minerals, magnetic susceptibility, 17911
 tungsten-cobalt alloys reaction with oxygen at 1,000° and 1,100° K, 14352
 tungsten-cobalt system for compositions to 85 atomic percent, 12816

Cobalt isotopes, Co-60, distribution in freshwater ponds, 15651

Coburn, Kenneth R., physiological, psychological and bacteriological aspects of 20 days in full pressure suits, etc., 6723

Cocco, Joseph K., employee earnings and hours in retail trade, 8302

Cochise County, Ariz., population, special census, 10371

Cochran, Andrew A.:
 recovery of manganese as chloride from ores and slags, 11369

Cochran, Corbie F., relief, 7630

Cochran, F. L., plutonium metallography, 10293

Cochran, J., Quehanna pilot plant first generation process operations, 5777

Cochran, Thomas H., effects of fluid properties and gravity level on boiling in discrete bubble region, 15562

Cockroaches, how to control them, 7273

Cocks, Charles A., Missouri Basin Inter-Agency Committee, minutes of meetings, 5133, 14362, 16869-870

Coconino National Forest, Wild Bill Range, relationship between timber and cattle on Ponderosa pine range, 16652

Code of conduct for Armed Forces, *see* Conduct of life.

Code of Federal regulations, 3102, 6266-96, 7975-89, 9459-86, 11030-47, 12515-528, 14033-35
 general provisions, 16586
 index, 12515
see also for titles, chapters, etc., of the Code printed separately, subject involved.

Codes:
 computer-based geographic coding for 1970 census (paper), 4304
 efficient coding system for deep space probes with specific application to pioneer missions, 14493
 freight description and suffixes, Army regulation, change, 14790
 transformation task that provides performance measures of nonverbal mediation (Cotran), 16916
see also Codes of law—Machine records codes—also headings beginning Code—also subjects.

Codes of law:
 District of Columbia, 1967 edition, 16333
 United States—
 annotated, or Federal Code, provide for distribution to Members of House of Representatives, 16231
 1964 edition, supplement, 12140, 13473
 revision and codification study—
 authorization, report, 4608
 resumé of activities, report, 10743
 title 5, codify provisions of Public law 89-487—
 law, 12165
 reports, 7707, 10780
 title 37, amend, report, 14942
 title 38, compilation, 755
 titles 5, 14, and 37, amend—
 law, 17537
 reports, 7706, 15089
see also subjects.

Codex Alimentarius Commission, international standards for food products, U.S. delegates, etc., 2136, 9353

Codington County, S. Dak., soil survey report, 7134

Coe, Fredric L.:
 effect of hydrazine upon renal blood flow, 11967
 effects of monomethylhydrazine upon renal function, 15901

Coe, Michael D., early cultures and human ecology in south coastal Guatemala, 9954

Coefficients:
 Doppler, Monte Carlo program for calculation, 18030
 drag, and local flow properties of family of blunt bodies, 18056
 drag, of microscopic spheres in free-molecule flow, 11407
 Fourier analysis, diurnal variation of $f_0 F_2$, influence of earth's magnetic field, 8512
 friction, for laminar and turbulent flow, correlation with ratios of surface bulk temperature, 17014
 gamma ray angular distribution, compilation, 12013
 heat transfer, and static pressures for condensation of high-velocity steam within tube, 9911
 Mathieu functions, tables, 14513
 1970 input-output, 17891
 second virial coefficients for hydrogen, quantum mechanical calculations, 8527
 tables of folded sin x/x interpolation coefficients, 4413
 viscosity and thermal conductivity, of dilute nitrogen and oxygen, 5293

- Coefficients—Continued
Wigner 3j, 6j, and 9j for angular momenta
S 80, Fortran programs for calculation,
1828
Coffee, Daniel R., soil survey of Menard
County, Tex., 8701
Coffee:
foreign agriculture circulars, 3345
green coffee inventories, imports, and
roastings, 3384
international agreement, annual report,
6046
Coffee Creek, flood of Dec. 1964, erosion and
deposition, 17823
Coffey, Donald L., geology and ground-water
resources of Big Sandy Creek Valley,
Lincoln, Cheyenne, and Kiowa Counties,
Colo., 11191
Coffman, Jerry L., Parkfield, Calif., earth-
quake of June 27, 1966, 1934
Coffman, Joseph S., evaluation of western
phosphate industry, and its resources,
Wyoming and Utah, 11370
Cohen, A. Clifford, Jr., estimation in mixed
frequency distributions, 12947
Cohen, Allan J., onset of anomalous diffusion
in electron bombardment ion thruster,
2710
Cohen, Edwin, center for ITV, 997
Cohen, Gerald A., effect of edge constraint on
buckling of sandwich and ring-stiffened
120° conical shells subjected to external
pressure, 11417
Cohen, Milton M., proceedings against, re-
port, 699
Cohen, Wilbur J., womanpower policies,
17886
Cohn, Edward A., mergers and acquisitions
by retail grocery store companies, 2172
Coin Week, National, see National Coin
Week.
Coins:
coinage act of 1965, amend to permit use
of mint marks—
hearing, 10817
law, 12171
reports, 10602, 10765, 12248
outstanding and circulation, monthly
statement 3897
Coke:
mineral industry survey, 3103, 15462
minerals yearbook chapter, 5100
size and strength, effect of carbonization
conditions and coal properties, 16866
Utah coals and blends, coking properties,
11377
see also Coal.
Cold-air investigation of turbine for high-
temperature engine application, 5236
Cold Regions Research and Engineering
Laboratory:
research reports, 97, 1754, 4196-97, 5725,
7378-80, 8878, 10255-258, 11982, 13290-
292, 14792, 15930, 17374-376
science and engineering, environment,
1756, 14793-794
special reports, 98, 1755, 4198-99, 15931
technical reports, 99, 4200-2, 7381, 8879,
11983, 14791, 15932-933, 17377-379
Cold solid propellant motor has stop-restart
capability, 6830
Cold storage:
frozen food locker and freezer provision-
ing industry, 5648
regional holdings, summary, S761
report (periodical), 3104
Cold trap increases sensitivity of gas chro-
matograph, 5206
Cold war, see International relations.
Coldplate of pin fin design makes efficient
heat exchanger, 9839
Cole, E. R., beds, classification definitions,
18117
Cole, Everett L., soil survey of Ellis County,
Okla., 8703
States, 10363
Cole, Henry A., jr., baffle thickness effects in
fuel sloshing experiments, 2700
Cole, Samuel J., relief, 832
Coleman, George H., radiochemistry of
plutonium, 126
Coleman, Robert G., low-temperature reac-
tion zones and alpine ultramafic rocks of
California, Oregon, and Washington, 17817
Coleman, Warren F., jr., relief, 10718, 13567,
17492
Coleoptera, see Beetles—Weavils.
Colglazier, Robert W., Jr., advance to grade of
lieutenant general, authorizing, 2082
Coliform organisms, fecal coliforms in en-
vironment, sanitary significance, 6343
Colla, Lawrence, electron densities and scale
heights in topside ionosphere recorded at
Hawaii, 6736
Collagen, polypeptides and polymers related
to collagen, USSR studies, 14270
Collards, caterpillar control in South, 15847
Collecting of accounts:
debtors' accounts, effort to collect or other-
wise settle, Farmers Home Administra-
tion, GAO review, 4879
Justice Dept. policies and procedures for
judgments, fines, etc., GAO review,
11154
Collection and preservation of insects, 10182
Collective bargaining:
employee representation, milestone in in-
dustrial democracy (remarks), 6939,
8532
future (remarks), 2750
health and insurance plans, digest, 5058
major agreement expirations, 1967, lists,
16824
millions of ballots for industrial democ-
racy, 6938
poultry feed prices, California groups,
7944
purchaser and labor contract, escalating
theory (address), 15596
Collective defense treaties, 7743
Collectives, farmers, increased material in-
terest and improved wages, USSR study,
2475
Collector/collector guard ring balancing cir-
cuit eliminates edge effects, 2673
Collectors and collecting, duck stamp infor-
mation, 11075
College students, see Students.
Colleges and universities:
air pollution courses, 2806
architecture design awards—
excellence in design, new potential on
American campus, 7894
new shapes for ivory towers, 7904
campus and community (address), 15210
city and the city university (address),
11196
civilian career opportunities for college
graduates with Army Department, 8877
computers in higher education, report of
advisory committee, 8615
Counselor development in American so-
ciety, Government-university relations
in professional preparation and employ-
ment, conference recommendations, 2482
curricula in marine sciences, 17752
degree profile of science and technology
and Federal contributions, 14560
developing institutions, assistance, extend,
law, 464
directory, higher education, 16498
economic development and college enroll-
ment (address), 16477
education legislation, 1967, hearings,
16426
engineering degrees (1964-65) and enroll-
ments (fall 1965), 13953
enrollment, master's and higher degrees,
fall 1964, final report, 2182
enrollment, 1966 fall, 12467
enrollment, projections to 1985, United

INDEX 1967

Colleges and universities—Continued
 executive development programs in public service, university-sponsored, 2193
 facilities act of 1963, extend, etc., law, 464
 facilities act of 1965, amend, hearings, 15026
 Federal Government and higher education, contract, grant and loan programs, 7755
 Federal support for academic science and other educational activities, 13011, 17057
 financing college education, programs, etc. (remarks), 5571
 Government, universities, and international affairs, crisis in identity, report, 10516
 graduate academic facilities program, Public law 88-204, preparation and submission of proposals, manual, 17718
 graduate educational grants—
 for fishery research, 17774
 in aquatic sciences, 1077
 grants for international studies and research, etc., law, 412
 higher education act of 1965—
 administration of programs, 1966, notes and working papers, 12422
 amend, hearings, 15026
 amend and extend title 5—
 law, 12176
 reports, 12275, 13643, 13805
 educational media programs, 2178
 grants for library materials, policies and procedures manual, 9405
 institutional assistance grant program, 16502
 student loan program, 6% payment tables and amortization schedules, 7910
 title 1, community service and continuing education, newsletter, 3126
 title 3, strengthening developing institutions, 2185
 higher education in scientific age (remarks), 10306
 higher education reports, for participants in Bureau of Higher Education programs, 13954
 housing loans, and savings through more frequent payments, GAO report, 17814
 how Education Office assists college students and colleges, 4712
 industry and universities strengthen collaboration, USSR study, 6559
 library resources program, grants for library materials, policies and procedures manual, 9405
 LSD and marihuana use on campuses, 2128
 manpower research institutional grant program, progress report, 16795
 money for college, how to get, 16501
 NASA Western University Conference, summary report, 2616
 national defense education act—
 institutes for advanced study, preparing proposals, manual, 9401
 student loan program, college work-study program and list of participating institutions, 1001
 Negro, directory, 9679
 new dimensions in relationship of university and the physically handicapped (remarks), 13068
 new luster for college teaching (address), 9404
 new Soviet Academic settlement in Irkutsk, eastern Siberia, 9637
 nuclear physics research activities, Basel and Fribourg, Switzerland, 5011
 pension plans, tax treatment, report, 15093
 predominantly Negro, graduates—
 class of 1964, special report, 14625
 1965-66 directory, 2483
 prospective manpower situation for science and engineering staff, 14563

Colleges and universities—Continued
 psychiatric-mental health nursing institutions offering trainee stipends, 11760
 public college of arts and sciences, etc., establish in D.C.—
 law, 495
 report, 693
 research grants, etc., from HEW, indirect cost rates, guide, 8189
 resources and activities, systems for measuring and reporting, 17058
 Rumania, role of higher education for scientific research, 14223
 scientific activities, resources, 1964 expenditures and Jan. 1965 employment, preliminary report of survey, 2762
 sea grant colleges and program act—
 law, 402
 reports, 632, 679
 scientific organizations of labor in higher education, USSR, 16776
 selective service, college qualification test, bulletin of information, 5486
 seniors and graduates, opportunity in Coast Guard Officer Candidate School, 217
 staffing American colleges and universities, 7913
 State land-grant, Extension Service review (periodical), 3255
 teaching faculty, spring 1963, general characteristics, etc., survey, 9413
 university perspectives on manpower, seminar, proceedings, 15435
 urban research study centers, directory, 14919
 USSR—
 educational institutions, productivity discussed, 1292
 evening higher education institutions, prospects, 1164
 what OE's decentralization means to colleges, decisions from the field, 16497
 women, 7 years after graduation, survey, 7235
 work-study program, institutional matching, hours of work, amend law—
 law, 17536
 reports, 14952, 14959, 15125
 see also Junior colleges—also names of colleges and universities.
 Collette, Bruce B., catalog of type specimens of darters (Pisces, Percidae, Etheostomatini), 6951
 Collette, J. G. Rolland, space vehicle flight control systems, 12870
 Collins, A. Gene, bromide and iodide in oil-field brines in some Tertiary and Cretaceous formations, 11385
 Collins, Arthur B., III, density and height growth in natural slash pine, 15289
 Collins, C. H., development of radioactive pebble bed chemical reactor system, 12011
 Collins, Frederick G., allergy and sinus disease in aviators, 14782
 Collins, Robert L., Jr., three-dimensional analysis of tangential yo-yo despin device on rotating body, 6883
 Collins, Ronald P.,
 mineral industry of—
 Idaho, 1400
 Montana, 6660
 Oregon, 2561
 Washington, 2565
 Collins, William E.:
 adaptation to vestibular disorientation—eye-movements and subjective turning responses, etc., 15980
 influence on adaptation of interrupting myastagmic eye movements with opposing stimuli, 7447
 visual fixation on nystagmus and sensations of turning, etc., 15981
 Collins, Winifred Q., meeting challenge of later years, 8802

Collisions, *see* Motor vehicle accidents.
 Collisions (electronic):
 low energy, cross section data, bibliography, 8521
 Monte Carlo code for solution of planar electron-diode problems including electron-neutral elastic collisions, 15558
 resonant frequencies of dielectric sphere immersed in collisional plasma, 12929
 Colloids, asbestos fibrils as reinforcements for polymeric structures, 16514
 Colman, J. M., timing and firing, 1810
 Colombia:
 agricultural commodities, agreement, 7173
 education, exchange commission and financing of programs, agreement, 14683
 foreign trade regulations, 16100
 mineral industry, minerals yearbook chapter, 11360
 projects, planning and supervision by AID, GAO review, 16677
 sea level canal site, joint technical-economic feasibility investigations agreement, 11335
 Colonial National Historical Park:
 properties within, acquire—
 law, 16130
 reports, 12247, 15111
 Colonic polyps, *see* Polyps.
 Color:
 color-name as function of stimulus intensity and duration, 14320
 induction using asynchronous flashes, 12794
 modulation of stationary light beam, 2628
 signal lights, selection, definition, measurement, production, and use, 8522
 slide rule-type color chart predicts reproduced photo tones, 11436
 treatise on color, 11595
 use for safety in industry, 8297
 Color blindness, defective vision, diagnostic tests, bibliography, 17411
 Color codes:
 ammunition, military standard, 16467
 color-coded sleeve shutters, use to accelerate oscillograph channel selection, 17991
 Color it green with trees, 5676
 Color perception, Farnsworth Lantern, use in Navy tests 1955-65, performance record, 16845
 Colorado:
 area measurement report, 5809
 ash flows and related volcanic rocks associated with Creede caldera, 8166
 census of agriculture, 1964, State and county statistics, 12092
 census of mineral industries, 1963, area statistics, 5824
 central—
 camper and campground characteristics, cost implications, 14113
 high mountain watersheds, sediment yields, 2332
 climatological data, 3096
 county business patterns, 170, 13366
 Cripple Creek district, distribution of gold, tellurium, silver and mercury, 9571
 early Indian tribes of Lower Plateau, 6437
 electric rate book, 1052
 Green River formation, geology and fuel resources, 12610
 High Plains, ground water development, 4893
 hydrologic performance of floodwater-retarding structures during storms of June 16-17, 1965, report, 14651
 indicators and associated decay of Englemann spruce, 6371
 lodgepole pine, yield tables for managed stands, 11140
 mineral industry, minerals yearbook chapter, 8345

Colorado—Continued
 plateau region, Morrison formation, petrology, 12613
 ponderosa pine-bunchgrass range, effects of cattle grazing, 14764
 ponderosa pine zone, cattle diets on native and seeded ranges, 6369
 postal map, 15652
 precipitation data, hourly, 3401
 radioactivity, airborne, 1952-55, maps, 1802
 retrocede jurisdiction over Fort Lyon Veterans Hospital to—
 law, 368
 report, 898
 sedimentary rocks, chemical composition, 14172
 shale oil specific gravity from Green River formation, stratigraphic and geographic variation, 2587
 soil survey laboratory data and descriptions, 14659
 spruce-fir clearcuttings, stocking of reproduction, 2314
 ternary diagrams of quartz-feldspar content of pegmatites, 1111
 water supply outlook—
 and snow surveys, 4045
 early season snow report, 5519
 special snow report, 15750
 Colorado National Monument, general information, 6978
 Colorado River and Valley:
 authorize Central Arizona project, report, 13826
 basin, surface water quality, 11192
 boundary waters, loan, agreement with Mexico, 2914
 storage project—
 Curecauti storage unit, general information, 11770
 general information, 13102
 10th annual report, 6055
 print as Senate document, report, 6084
 water supply outlook and snow surveys—
 drainage basin, 4045
 lower basin, 4044
 watershed conditions affecting water supply, 3922
 Colorado River Basin project, construct, etc., hearings, 9162, 10851
 Colorado River storage project:
 Navajo Dam and Reservoir, technical record of design and construction, 7103, 8667
 Colorectal polypoid lesions, 14772
 Colored minorities and present British policies, 9747
 Colorimetry:
 automated urinalysis technique determines concentration of creatine, etc., 14437
 transmission characteristics of autoanalyzer filters, determination, 7352
 Colors, *see* Color.
 Colton, Calif., ground water, patterns of subsurface flow, 1118
 Columbia, S.C., Veterans Administration hospital, operation, hearing, 13718
 Columbia Basin project:
 Banks Lake, recreational costs to be non-reimbursable—
 hearing, 7811
 report, 9264
 general information, 18195
 Columbia County, Pa., soil survey report, 11804
 Columbia River and Valley:
 basin, water pollution and other related fields, inventory of research, 15254
 fish passage report, Bonneville, The Dalles, McNary and Ice Harbor Dams, 13974
 flood season flow near The Dalles, 3907

INDEX 1967

Columbia River and Valley—Continued
lower basin, surface water quality, 11192
monthly mean discharge at gaging stations
and change of storage in lakes, etc.,
3907
power system, annual reports, 10324-325
storage in major power reservoirs, monthly
report, 3907
water supply outlook and snow surveys,
4052
Columbium, *see* Niobium.
Columbus, Ohio, area wage survey, 6607
Colusa National Wildlife Refuge, mammals,
list, 8030
Colville Reservation:
Confederated Tribes, Federal supervision,
termination—
hearing, 12410
report, 15123
Colville River and Valley, coal resources of
Cape Lisburne-Colville River region, Alas-
ka, 15306
Comanche County, Okla., soil survey re-
port, 15746
Comandra, grazing and comandra blister rust,
14127
Comatulids, suborders Oligophreata and Mac-
rophreata, monograph, 14528
Combat:
readiness—
4th Infantry Division, Fort Lewis,
Wash., 5th Infantry Division (mech-
anized), Fort Carson, Colo., 1st and
2d Armored Divisions, Fort Hood,
Tex., subcommittee report, 2105
101st Airborne Division, Fort Campbell,
Ky., etc., subcommittee report, 4629
status and readiness of United States
Atlantic Fleet, report, 10812
team training, 18109
Combat (fishing vessel):
exploratory collection made in south-west-
ern North Atlantic, 1956-60, correction,
8035
Combat areas, theater of operations air bases,
planning and design, Air Force manual,
1727
Combat command, barbed wire command,
14796
Combat vehicles, *see* Motor vehicles.
Combination spacer and gasket provides
effective static seal, 2630
Combustion:
charring rate of wood, review of Informa-
tion, 8059
Combustibility of materials in oxygen-
helium and oxygen-nitrogen atmos-
pheres, 5706
Incineration in cylindrical combustion
chamber, experimental studies, 9763
Instability, dynamic response of gaseous-
hydrogen flow system and application to
high-frequency combustion instability,
12953
nonconstant area, and mixing in ramjet
and rocket ramjet hybrid engines,
analysis, 1478
oxidizer-rich oxygen-hydrogen characteris-
tics, preliminary investigation, 2708
rocket, gaseous-hydrogen-liquid oxygen at
supercritical chamber pressures, 17001
transverse-mode solid-propellant combus-
tion instability in vortex burner, 1511
underground, oil-recovery experiments in
Venango second sand, Reno pool,
Venango County, Pa., 11372
Combustion chamber struts can be effectively
transpiration cooled, 6805
Combustion products, emitted by nitrogen
tetroxide disposal unit, study, 11515
Combustors:
liquid-oxygen and gaseous-hydrogen,
chugging instability, 11547

Combustors—Continued
transverse-mode solid-propellant combus-
tion instability in vortex burner, experi-
mental investigation, 1511
Comintern, *see* Communist International.
Commauer, Henry S., testimony, 6100
Command (military):
information processing systems, human
factors research, 119
see also Combat command.
Command and staff action, 2533
Command processors, 14479
Commanders digest (periodical), 3105
Commemorative medals, *see* Medals.
Commemorative stamps, *see* Postage stamps.
Commerce:
agricultural trade development and assist-
ance act of 1954, Library of Congress
project newsletter, 3507
Alaska trade study, 15243
automotive products, trade agreement with
Canada, 2924
commerce and foreign trade, code of Fed-
eral regulations, 12523
Commerce business daily, 3107
commerce passing through canals at Sault
Ste. Marie, Michigan, and Ontario, salt
water ship movements, statistics, 9423
commercial holidays abroad, list, 9601
East-West relations, recent developments,
hearing, 4533
East-West trade—
Battle act, report, 7147
issues (address), 10099
U.S. policy (remarks), 12127
European Economic Community, agricul-
tural trade, 1950-64, statistical refer-
ence, 2174
foreign agricultural trade, 4100
by commodities, 6174, 13951
by countries, 10927, 16495
monthly, 3343
foreign business practices, 9602
foreign market reports service, listing,
12653
foreign trade—
FT reports, 3351-59, 3987, 3995, 3998-
4006, 4362, 8956-59, 8961, 10399,
12087-89, 14836, 17441
future of U.S. policy—
hearings, 16146
subcommittee report, 16147
issues and objectives of U.S. policy,
statements, compendium, 16148
peaceful engagement with the East
(address), 234
removing barriers (address), 16096
role in U.S. economy (address), 16098
sell your products with business pro-
posals carried abroad by U.S. trade
missions, 6166
United States, 1960-66, annual, 14881
United States 1965 and 1966, prelimi-
nary, 1579
foreign trade regulations—
Angola, 7574
Arabian Gulf States, 17480
Bahamas, 7575
Barbados, 9019
Bermuda, 9017
Brazil, 17479
Central America Common Market,
17478
Chile, 17482
Columbia, 16100
Dominican Republic, 4442
Ecuador, 16101
Finland, 17481
Ghana, 4432
Guyana, 230
Haiti, 13457
India, 9014
Iran, 17474
Israel, 9020
Korea, Republic, 16106
Malaysia, 13458
Mozambique, 4437

Commerce-Continued

foreign trade regulations-continued
 Netherlands Antilles, 13460
 Paraguay, 4446
 Sierra Leone, 12135
 Somali Republic, 12137
 Surinam, 4441, 12134
 Turkey, 12136
 Zambia, 10459
 foreign trade statistics-
 country designations, code classification, schedule C, 4358, 5849
 regulations, compilation, 8960
 U.S., classifications and cross-classifications, 17440
 U.S. districts and ports, code classification, schedule D, 4359, 8936
 future international meetings, world list, 4074
 future U.S. world trade policy (address), 18218
 international agricultural trade, terms used, 9524
 international commerce (periodical), 3434
 supplements, 2417, 17853
 international trade (addresses), 6300, 7571, 8224, 10455-456, 10466, 14663
 international trade, encouragement, convention with Trinidad and Tobago-hearing, 17651
 message from the President, 6063
 report, 17620
 interstate-
 establishment of fair labor standards in employments, 2970
 fresh potatoes purchased or sold in interstate commerce, require to be labeled according to State in which grown, hearing, 17649
 interstate commerce act-amend
 hearings, 947, 16399
 law, 508
 reports, 890, 16374
 annotated
 advance bulletins, 2987
 1962 supplement, 6475
 interstate taxation act, reports, 9084, 13682
 laws, compilation, 1990
 publications, price list, 7053
 interstate or foreign, abusive and harassing telephone calls, amend communications act-hearings, 10826
 reports, 4582, 9294
 intoxicating liquors, require interstate shipments be accompanied by bill of lading, amend U.S. Code, report, 16254
 lake, passing through canals at Sault Ste. Marie, Mich. and Ontario, 6208
 overseas, sample display service, new way to find agents and distributors, 4923, 14207
 Pacific Northwest forest industries, trade, 3774
 publications, price list, 5418
 Scandinavia today, billion dollar U.S. market, 9603
 steamship lines in foreign commerce of U.S., approved conference, rate and interconference agreements, 3037, 16576
 summaries of trade and tariff information, 7203, 8765, 18237
 technology and world trade for economic development, symposium proceedings, 8520
 trade agreements with-
 Canada, 17247
 Great Britain, 15803
 Japan, 15802
 trade and investment in developing countries, report, 9026
 trade expansion act of 1962, legislative history, 7761

Commerce-Continued

trade expansion program of American Steamship Lines Committee (remarks), 10467
 trade winds, good trade like good winds make for easy sailing (address), 17483
 U.S. commercial exhibitions, how to photograph, 7566
 U.S. trade policy, task after Kennedy Round (address), 2936
 United States oceanborne foreign trade, 1966 review, 17909
 United States position in world trade (statement), 17554
 United States trade with-
 Communist areas in Eastern Europe and Asia, 16108
 Puerto Rico and U.S. possessions, monthly report, 3259
 major world areas, 1942, 4436, 10460
 waterborne transportation, inter-American convention, report, 6065
 waterborne, U.S. life lines, impact on American industrial productivity, 8574
 world agricultural trade, Brazil's position, 17713
 world trade-
 recent developments (remarks), 1953
 tallow & greases, 4817
 technology and world trade (remarks), 1958
 through open markets (remarks), 1654
 see also Imports-Navigation-also certain headings beginning Commercial-also names or classes of articles of commerce-also names of countries and places.
 Commerce Committee, Senate:
 calendar, 3492
 committee prints, 10828, 16404
 hearings, 945-948, 2109-12, 4634-36, 6093-95, 7802, 9310, 10823-827, 12403-406, 13850-856, 15153, 16398-403, 17645-649
 investigations and studies, authorization, report, 6077
 reports, 887-892, 4577, 4582, 4585, 9294, 10756, 10758, 10760-764, 12367-368, 12378, 13825, 15065, 15084, 15103, 15107, 15143, 16374, 17628, 17632
 Commerce Department:
 activities, 17484
 activities, accomplishments, etc. (remarks), 4427
 agency of business, promotes economic growth, guidebook, 5963
 annual report, 7562
 appropriations, 1967, law, 501
 appropriations, 1968-hearings, 10632, 16390
 report, 10616, 16372
 Assistant Secretary, nomination of-McQuade, Lawrence C., hearing, 13855
 Shaw, William H., hearings, 6094
 audit activities, efficiency, etc., GAO review, 14158
 Boulder laboratories, general information, 16097
 cooperative offices, partners in progress, 1948
 maritime functions, transfer to independent administration-hearings, 16335
 maritime functions, transfer to independent administration reports, 15009, 16278
 marketing and distribution, objectives (address), 245
 marketing services to and for business (address), 1825
 meeting with officials, hearings, 9150
 new role in marketing (address), 227
 news, 16477
 press releases, 3713

INDEX 1967

Commerce Department—Continued
 primary agency of Government responsible
 for dealing with business and business
 problems (address), 142
 promotes economic growth, 17484
 publications, 1965, supplement, 4454
 role in urban economic revitalization (ad-
 dress), 16479
 Secretary—
 ex officio member of American Revolution Bicentennial Commission, 13651
 nomination of Alexander B. Trow-
 bridge, hearing, 12406
 transfer certain functions relating to
 ship mortgages—
 hearings, 9159, 10849
 message from the President, 7598
 State Technical Services Office, annual re-
 port, 7572
 telephone directory, 16110
 Commercial aviation, *see* Air carriers.
 Commercial banks, *see* Banks and banking.
 Commercial fisheries, *see* Fish and fisheries.
 Commercial Fisheries Bureau:—
 annual report, 4807, 15266
 appropriations, 1968, hearings, 7734
 biological laboratories—
 Beaufort, N.C., tagging summary of
 American shad, and striped bass,
 8037
 Galveston, Tex., report, 17773
 Gulf Breeze, Fla., report, 14055
 graduate educational grants, 17774
 new publications, monthly list, 3577
 region 2, exploratory fishing and gear re-
 search, report, 2275
 Technological Laboratory, Pascagoula,
 Miss., reports, 4801, 16620
 Commercial policy:
 Kennedy Round, trade policies, hearing,
 7805
 our future trade policy, quotas or compe-
 tion? (address), 18220
 trade policy and problems (remarks),
 11886
 Commercial practices, code of Federal regu-
 lations, 6274-75
 Commercial products:
 census of business, 1963, merchandise line
 sales, retail trade, statistics, bound vol-
 umes, 5818, 8931, 10341
 commodity classification for transporta-
 tion, statistics, 13352
 commodity transportation survey, census
 1963—
 commodity groups, 1856, 7472
 shipper groups, 1855
 shipper groups and production areas,
 7473
 domestic merchandise, U.S. exports, 1965
 statistics, 8961
 exports—
 foreign trade reports, 3354-55, 8959,
 12087-89
 statistical classification, schedule B,
 1857, 3849, 5895-97, 7474
 imports—
 foreign trade reports, 3351, 8956-59,
 14836
 Puerto Rican shipments, commodity
 classification, schedule P, 10386
 markets for U.S. products—
 Chile, 2417
 Taiwan, 17853
 merchandise—
 exports, summary reports, 4005
 imports, summary reports, 4006
 potential demand, 1970 projections, 2508
 product standard PS (series), 5285-87,
 6918-19, 11586-587, 12988, 17037
 product standards of Shanghai Municipal
 Bureau of Machine and Electrical Indus-
 tries, Communist China, 12759
 products list circular, new products devel-
 opment for small business, 3775
 rail revenue contribution by commodity
 and territory, 8234

Commercial products—Continued
 sell your products with business proposals
 carried abroad by U.S. trade missions,
 6466
 tariff treatment of articles assembled
 abroad of products of U.S., law, 510
 technology and your new products, 13118
 transporting merchandise to southeastern
 Alaska in part over Canadian highways,
 exempt from Merchant marine act, re-
 port, 15107
 USSR consumer goods and domestic trade,
 translations, 3970
 Vietnam commodity import program, fol-
 lowup investigation, report, 14997
see also names of products.
 Commercial standards, *see* Standards and
 standardization.
 Commercial treaties:
 economic relations with—
 Thailand, report, 15063
 Togolese Republic, treaty, 8743
 trade agreement with Argentina, 2918
 trade agreements and adjustment assist-
 ance programs, code of Federal regula-
 tions, 11046
 trade agreements program, 1965, report—
 departmental edition, 5404
 document edition, 4469
 trade agreements, program operations,
 July 1963-June 1964, report, 5564
 trade expansion act of 1962, legislative
 history, 7761
see also General agreement on tariffs and
 trade.
 Commercial warehouse service plan for De-
 partment of Defense agencies, 15182
 Commissaries, stores, grocery department
 operations, technical manual, change, 7396
 Commission for Educational and Cultural
 Exchange between United States of Amer-
 ica and United Arab Republic, agreement,
 11870
 Commission for Educational Exchange be-
 tween United States and Brazil, agreement,
 11837
 Commission on Balanced Economic Develop-
 ment, *see* Balanced Economic Development
 Commission.
 Commission on Government Procurement, *see*
 Government Procurement Commission.
 Commission on Pennsylvania Avenue, *see*
 Pennsylvania Avenue Commission.
 Commission on Revision of Criminal Laws of
 District of Columbia, establish, hearings,
 10644
 Commissioned officers, *see* Coast Guard Re-
 serve—Public Health Service.
 Commissioners, *see* United States commis-
 sioners.
 Commissioners of District of Columbia, *see*
 District of Columbia.
 Commissions, *see* names of commissions.
 Commitment for progress, the Americas plan
 for decade of urgency, 11828
 Committee on Education, President's Com-
 mission on Status of Women, report, ex-
 cerpts on counseling and guidance, 7236
 Committees:
 county ASCS employees, extend benefits
 to—
 hearings, 10870, 17609
 report, 13807
 safety committee activities, 9715, 16806
see also Congressional committees.
 Commodities, *see*, Agricultural products—
 Commercial products—*also* names of com-
 modities.
 Commodity Credit Corporation:
 acquisition and disposal by CCC of farm
 commodities, 19
 appropriations, 1968, hearings, 10629
 audit report, 7611
 corn marketing, impact on small business,
 report, 668

Commodity Credit Corporation—Continued
 cotton inventory management, GAO follow-up review, 15297
 financial condition and operations, 3819
 financial statements, GAO examination, 8132
 grain, comparison of costs of storing on farm with rates paid for such storage, GAO report, 2342
 operations, June 30, 1966, graphic summary, charts, 9027
 orderly liquidation of stocks of agricultural commodities held by CCC, etc., 5665
 rice marketing excess, delivery to, report, 16369
 sale of grain storage facilities, law, 12159
 sales list, monthly, 5083
 savings if interest costs on repaid price-support loans and storage facility and equipment loans are recovered, GAO report, 16678
 statutes, compilation, 7262
 wheat export program, GAO review, 14159
 wheat marketing allocation program, need to further revise regulations to minimize loss to Government, 1100
 Commodity Exchange Authority, appropriations, 1965, hearings, 10629, 12397
 Commodity exchanges:
 act, amend—
 hearings, 16302
 reports, 16297, 17582
 code of Federal regulations, 12524
 commodity futures statistics, July 1965—
 June 1966, 4146
 Common carriers, *see* Communications.
 Common Market, *see* European Economic Community.
 Commonwealth Parliamentary Association conference, Ottawa, Canada, report of U.S. delegation, 4637
 Communicable Disease Center, Bureau of State Services, accounting system, review, GAO report, 1101
 Communication (psychology):
 communicating by language, speech process, conference proceedings, 7061
 Communications:
 act of 1934, amend—
 hearings, 10824, 10826, 13710, 16400
 reports, 4582, 9294, 10756, 14980, 16245
 aeronautical, AFS handbook, 2991
 Air Force, officers jobs, types, 15892
 Alaska earthquake, Mar. 27, 1964, effects on transportation, communications, and utilities (series), 6402, 12609
 Alaska, long-lines facilities, Government-owned, disposal—
 hearings, 18307
 reports, 10747, 16262
 antimechanized operations, Fleet Marine Force manual, 16841
 automated, AF manual, 10218
 cable communication lines, USSR book excerpts, 15392
 career opportunities, State Department, world-wide assignments, 5524
 carriers, discontinuance of service, FCC rules and regulations, 3279
 channels, monitor assures availability and quality, 8460
 circuits, spare, Government-owned in Europe, use by Defense Dept., GAO report, 16672
 common carriers—
 and affiliates, reports, FCC rules and regulations, 3279
 miscellaneous rules, FCC rules and regulations, 3279
 preservation of records, FCC rules and regulations, 3279
 statistics, 7955

Communications—Continued
 electronics activities—
 basic C-E concepts and relationships, manual, 10217
 commercial services for Air Force, manual, 4164
 facility and system planning, 10219
 terminology, Air Force manual, 8856
 electronics, principles and applications of mathematics, technical manual, change, 15953
 electronics reference data, Army field manual, 4164
 equipment—
 current industrial reports, 5856
 Federal item identification guides for supply cataloging, supplements, 3289
 facilities between Alaska and U.S. mainland, savings from more economical use, Air Force Dept., GAO report, 15301
 Federal Communications Commission rules and regulations, transmittal sheets, 3279
 industry wage survey, 6604
 information transmission systems, quantum effects, 18057
 maintenance of air-ground facilities, FAA handbook, 10980
 modems, communications and foreign policy, report, 10623
 personal communication system combines high performance with miniaturization, 11456
 problems of information transmission (USSR periodical), 3772
 radio science (periodical), 3803
 satellite—
 act of 1962, report on activities, etc., message from the President, 9066
 bibliography, 11433
 Government use, 1967—
 hearings, 13707
 report, 15000
 passive, orbit position control, handbook, 11398
 Syncom engineering report, 11556
 scientific and technical, U.S. Government, progress, 6244
 system and depots in metropolitan France, agreement with France, 5551
 use of Federal Aviation Agency systems, FAA regulations, 11004
 USSR—
 herald of communications (periodical), 3397
 translations, 3969
 see also Electronics—Military communications—Radio communication—Space communications — Telecommunication — Telephone.
 Communications relay equipment operator, *see* Electronics mechanics.
 Communicator, National Conference on Air Pollution, 3594
 Communism:
 Bolshevization of Islam, 6496
 building of communism and world revolutionary process, USSR study, 12715
 Caribbean threat to U.S., hearings, 957, 2125, 7816
 Communist Party representatives of Arab countries, conference resolutions, 12718
 Communist world in 1967, hearing, 6191
 contemporary international Communist workers, and national-liberation movement, USSR studies, 5003-4
 cybernetics in service of, information theory, computer technology, and semiotics, 12742
 insurgent infrastructure in South Vietnam, organization and strategy, 13298
 international developments, translations, 3960
 Latin America, activities, 1967—
 hearings, 12298
 report, 12285
 Leninist norms of party life, 1258

INDEX 1967

Communism—Continued

- Mao's cultural revolution, review by USSR's Literary gazette, 12760
- organizations, registration, etc., amend internal security act, report, 16290
- peaceful engagement with the East (address), 234
- problems (periodical), 3771
- religion, Communist exploitation, hearing, print additional copies, report, 12371
- scientific, principles, USSR study, 12682
- Soviet propaganda, techniques, 12322
- print as Senate document, report, 12372
- USSR, Kommunist (periodical), translations, 3947
- Viet-nam, Communist-directed forces, 8715, 13137
- world movement, 1818-1957, selective chronology, 12206
- print as House document, reports, 10593, 10787
- world strength of Communist Party organizations, 13155
- see also Un-American activities.
- Communist China, see China.
- Communist International, activities of Third International, Polish discussion, 5007
- Communist Party of Bulgaria: and development of natural sciences, 9th congress, 2465
- 9th Congress, hydrometeorological service tasks discussed, 11253
- organizational fundamentals, principles and standards of party life, 6566
- Communist Party of France, social composition and evolution, 9651
- Communist Party of Iraq, Communist movement in Iraq, translation, 14261
- Communist Party of Poland, 3d international activities, discussion, 5007
- Communist Party of Soviet Union: Leninist norms of party life, 1258
- 23d Congress, on struggle against imperialist ideology, USSR study, 9654
- Communist Party of Ukraine, general progress of Ukraine under Soviet power, central committee review, USSR study, 6576
- Communist Party of United States
- Communist origin and manipulation of Vietnam Week, Apr. 8-15, 1967, report, 7757
- Soviet pawn, 6114
- Communities, see Cities and towns—Rural communities.
- Community and family service for civil defense, 16050
- Community centers, national fallout shelter design competition, awards, 16060
- see also Recreation centers.
- Community development and civil defense, 16059
- Community development programs: community action programs—amendments to economic opportunity act, narrative summary, 9382
- directories, grantees, 982, 7873, 10906
- management information reporting by community action agencies, quarterly report, 13939
- declaration of objectives for older Americans, is your community ready?, 10145
- district act of 1966, rural America, planning of public services, etc., reports, 622, 10748
- Federal assistance programs, catalog, 12447
- Federal-State programs for developing community resources, 6248
- films, filmstrips, slides, and audio tapes, bibliography, 11204

Community development programs—Con.

- Head Start child development programs, how to apply for instructions, 6163
- manual of policies and instructions, 16483
- homes, etc., publications, price list, 7057
- Peace Corps, 5375
- Small Business Administration, loans under 502 program, 11789
- smaller communities program brings industries and jobs to rural areas, 2195
- understanding war on poverty, public affairs handbook, 13940
- workable program for community improvement, citizens advisory committees, guide, 9579
- Community facilities: and Public Health Service hospitals, cooperative activities—hearings, 12305, 17670
- reports, 16230, 16247
- care of mentally ill, annotated bibliography, 1590
- centers with fallout shelter as dual-purpose space, Brooklyn architects competition, awards, 7529
- enriching community life, Federal assistance program for neighborhood facilities, 2380
- mental health centers, bold new approach, 13070
- film announcement, 17138
- mental retardation facilities, extend, etc., laws—
- hearings, 10659, 17666
- reports, 14971, 16246
- mentally retarded, progress report, 14629
- neighborhood service centers, services offered, problems, etc., 5595
- see also Public facilities.
- Community health, see Health.
- Community life: community involvement in civil defense, suggestions by American National Red Cross, 16051
- community planning for health, education, and welfare, bibliography, 16540
- senior citizens month 1967, guide to community action and year-round activity, 8802
- see also Neighborhoods.
- Community planning for nursing in District of Columbia metropolitan area, 18158
- Community relations, one million dropouts, Sputnik of 1967, people willing to help, 17721
- Community Relations Service: annual report, 10472
- appropriations, increase, message from the President, 12199
- CRS media relations, informational monitoring service, 3165
- press releases, 3714
- Community surveys: Atlantida, case study in household sample surveys—content and design of household surveys, Spanish edition, 5898
- distribution and receipt of material, 1885
- editing and coding, 4360
- field operations, instruction manuals, 182
- population data controls, Spanish edition, 5899
- survey objectives and description of country, Spanish edition, 7496
- tabulation process, 7497
- workbook for case study, 10387
- handicapped workers, challenge of employment barriers, 1968 report theme contest, 11th and 12th grade students, announcement, 15667
- wages, 6615

- Community work and training program, message from the President, 7606
- Commutators, current steering commutator offers versatility, 18005
- Commuter railroad cars, *see* Railroad cars.
- Compact (Interstate), *see* Interstate agreements.
- Companies:
- acceptable as sureties on Federal bonds, list, 15811
 - engaged in dual distribution, require disclosure of separate annual operating data, etc., hearings, 6115
 - filing annual reports with SEC, directory, 13112
- Comparative decay resistance of heartwood of native species, 8065
- Comparators, thermoelectric metal comparator determines composition of metals and alloys, 8387
- Compare, Cicili, relief of children, 610
- Comparison of recent projections of United States population, 11792
- Compartments, pools, and spaces in medical physiology, symposium, 15959
- Compatibility, biaxially stressed D-43 alloy with refluxing potassium, 11422
- Compendium of medical advertising, 14074
- Compensation, *see* Employers' liability and workmen's compensation—Salaries—Wages.
- Competition:
- air transportation industry (talk), 7519
 - are planning and regulation replacing competition in new industrial state? hearing, 16438
 - drug industry, problems, present status, hearings, 16436, 17677
 - oil shale development, competitive aspects, hearings, 17659
- Competitive position of U.S. farm products in Japanese market, 995
- Compilation of treaties and agreements of interest to Navy, 11291
- Compliance officer's manual, handbook of compliance procedures under title 6 of civil rights act of 1964, 1906
- Composite bulkhead fabrication development, 6752
- Composite materials:
- analyses of composite structures, 2602
 - coating or plastic compositions, classification definitions, 8605
 - discontinuous-fiber composites, metallurgical and geometrical factors affecting elevated-temperature tensile properties, 8498, 14451
 - filamentary, high-performance, Air Force basic research, 15890
 - industrial evaluation of radiation processed wood-plastic composites, 5780
 - JT graphite, oxidation, static, subsonic, and supersonic tests, 18053
 - new metal and metal-ceramic composites, 5194
 - phenolic nylon, effect of composition on ablative performance, 9889
 - porous metal and solid lubricants increase bearing life, 6742
 - space vehicle application, investigation, 12861
 - thermal and mechanical properties of non-degraded and thermally degraded phenolic-carbon composite, 16917
 - tungsten-fiber-reinforced copper stress-rupture and creep properties, 17002
 - weld rod corrects individual filler weaknesses, 9862
- Compositors, *see* Printers.
- Compound interest tables for long-term planning in forestry, 13212
- Compounds, new class, has very low vapor pressures, 12838
- see also* names or classes of compounds, or purpose for which used.
- Comprehensive care services in your community, 5426
- Comprehensive export schedules, 3127, 8223
- Compressed air medicine, *see* Medicine.
- Compressed gases, *see* Gases.
- Compressibility, Burnett apparatus, PVT data, method for treating, 16863
- Compression processors, *see* Processors.
- Compression tests of open-face truss-core sandwich panels, 5255
- Compressive behavior of plates fabricated from glass filaments and epoxy resin, 9895
- Compressors:
- Air, trailer-mounted, rigging for airdrop, 15951
 - axial-flow, inlet stages under high loading, aspect ratio and curvature variations, 9916
 - blade vibration, reduced by wire material, 6824
 - Burnett compressibility apparatus, PVT data, method for treating, 16863
 - current industrial reports, 4337, 17434
 - Federal item identification guides for supply cataloging, supplements, 3288
 - numeric and alphanumeric algorithms, solid system, 14519
 - parametric study of advanced multistage axial-flow, 11419
 - reciprocating, rotary, and centrifugal, Federal item identification guide, 13916
 - rigging 210 CFM Davey, trailer-mounted air compressor, Army technical manual, 113
 - single-stage axial-flow, contribution of downstream stator to interaction noise, 9882
- Compton effect, internal, 1430
- Comptroller General, *see* General Accounting Office.
- Comptroller of Currency:
- nomination of William B. Camp, hearing, 4532
 - regulatory authority, strengthen—law, 409
 - reports, 666, 674, 691
 - report, 1965-66—departmental edition, 9028
 - document edition, 9050
- Comptrollers, Air Force comptroller (periodical), 15879
- Compulsory education, attendance, State laws, summaries, etc., 2191
- Computational procedure for finite difference solution of one-dimensional heat conduction problems reduces computer time, 2675
- Computations, *see* Numerical calculations.
- Computer operators, examination announcement, 14857
- Computer program utilizes FORTRAN IV subroutines for contour plotting, 16958
- Computer technicians, examination announcement, 14857
- Computers:
- and administrative efficiency, USSR study, 6506
 - automatic control, industrial application, 6509
 - computer specialists, computer programmer, computer systems analyst, examination announcement, 13441
 - electrocardiography and public health, report of recent studies, 11723
 - engineering, education problems, 1321
 - fluid digital computation systems, feasibility study, 12907
 - French, Soviet views, 1270
 - naval weather service computer products manual, 15618
 - technology—cybernetics in service of Communism, USSR studies, 12742
 - state in Czechoslovakia, 15409
- see also* Electronic computers.
- Computing machines, *see* Calculating machines.

INDEX 1967

- Comstock, G. L., dimensional changes in kiln-dried softwood lumber after surfacing and during storage, 2300
- Concentrated foods, *see* names or classes of foods.
- Concentration measurements of injected gas in supersonic stream, 8489
- Concepcion Garcia, Carlos V. De La, relief, 9252, 13491, 13596
- Conceptual design of 250 MGD desalination plant, 2396
- Conceptual design study of 50 million gallon per day MSF desalination plant and test module, 8216
- Conceptual design study of one million gallon per day MSM desalination plant-replacement for demonstration plant no. 2 at Point Loma, San Diego, Calif., 15330
- Concert and conciliation, next stage of Atlantic alliance, 18232
- Concessions, National Zoological Park, negotiate cooperative agreements granting, law, 476
- Concrete:
and concreting materials exposed to natural weathering, performance, investigation, 6214
brick and block industry, work injuries and accident causes, 16813
cement performance in concrete, 16528
field soniscope tests, 10-year summary of results, 7934
incinerator, building plan, 4124
mass, containing 3- and 6-in. maximum size, crushed limestone coarse aggregate, comparison of properties, 4745, 6216
pavements—
emergency construction, standard practice, Army technical manual, 1769
nondestructive testing, evaluation of Dynaflect, 16524
placements in building construction projects, inspection controls, Public Buildings Service, GAO review, 11153
post-stressed foundation may reduce machinery vibration, 15489
prestressed, beams, durability and behavior, investigation, 9424
prestressed concrete reactor vessel—
model 1, 13320
model 2, 13321
prestressed concrete vessel for boiling-water reactor, 13319
reinforced—
slabs, influence of reinforcing details on yield line pattern and ultimate load-carrying capacity, 17736
supports for overhead lines, 6536
St. Lawrence Seaway, investigation of concrete in locks, 13987
stem for access hole, Project Pre-Schooner, design, etc., 17395
strengths and air contents, freezing and thawing tests, 13986
structural design for buildings, Army technical manual, 7391
surfaces—
deliterious effects of form lumber on, 13988
formed, reducing size and number of voids, methods, 16529
vibration, review of literature, 13985
winter construction practices, earthwork, survey, 98
wire bar supports for reinforced concrete construction, standard of trade, 6919
workability, measuring by vibrating slope method, 4742
see also Masonry.
- Conde, Augusto J. Fernandez, *see* Fernandez-Conde
- Conde, Augusto J., relief, 10537, 13479, 13737
- Condensation:
condensing mercury flow in 0- and 1-G environments, photographic study, 12939
- Condensation—Continued
freon-113 condensing in downward flow in vertical tube, local heat-transfer and pressure distributions, 11510
high velocity steam within tube, local heat-transfer coefficients and static pressures, 9911
mechanisms, research, 1140
Condensed milk, *see* Milk.
Condenser tubes, *see* Tubes.
Condensers (vapors and gases):
steady-state performance of potassium condenser, 12937
steam, industrial plant equipment hand-book, 977
Condom Valera, Jaime E., relief, 558
Condominium housing, *see* Housing.
Conduct of life:
Armed Forces—
code of conduct, Army pamphlet, 1764
U.S. fighting man's code, DoD pamphlet, 13286
Job Corps staff code, 9381
social usage abroad, guide for American officials and their families, 8712
Conduction of heat, *see* Heat transfer.
Conductivity (electric), *see* Electric conductivity.
Conductors (electric), *see* Electric conductors.
Conduits, fittings, Federal item identification guide, 15183
see also Electric conduits.
- Cones:
ablating conical teflon models, static aerodynamic characteristics, measured and computed, 11555
aerodynamic characteristics for cone-cylinder-frustum-cylinder configurations, 9804
blunt 120° configurations, low subsonic static and dynamic stability characteristics, 6893
boundary-layer transition on cooled 7.5° total-angle cone at Mach 10, 18021
high-drag bodies, aerodynamic drag characteristics, 9892
hypersonic viscous drag in rarefied flow, 12949
oscillating problem, solved in supersonic flow by small perturbation techniques, 6849
semiapex angle 40°, reentry configuration, subsonic longitudinal aerodynamic characteristics, 2701
spherically blunted—
aerodynamic characteristics at Mach 20, 14488
with base flares, aerodynamic characteristics, 1486
viscous hypersonic flow past slender cone, 9927
see also names of conifers.
- Confectionery:
current industrial reports, 3169, 12069
manufacturers' sales and distribution, 7449, 10328
- Confederate records, Treasury Department collection, preliminary inventory, 18074
- Confederated Bands of Ute Indian Tribes, *see* Ute Indians.
- Confederated Salish and Kootenai Tribes of Flathead Reservation, *see* Flathead Indians.
- Confederation of Canada, *see* Canada.
- Conference committees, reports, 628, 638, 645-647, 650, 652, 663-664, 672, 679, 681, 691, 701-702, 704, 706, 4502, 4504, 7673, 9081, 9110, 9134, 10563, 10611, 10614, 12252, 12255, 13629, 13657-658, 13667, 13672, 13689, 14946, 14963, 14987, 16244, 16251-252, 16261, 16265, 16277, 16284, 16287, 16291, 16300, 17573, 17576, 17580
- Conference of State Societies, Washington, D.C., change name, report, 9132

Conferences, congresses, etc.:
 conferences in Soviet bloc (periodical), 3130
 future international meetings, world list, 4073-74
 international organization and conference series, 5528-20, 8719-20, 11830, 14679, 18232
 organizing and conducting cooperatives' annual meetings, 15234
 President's Committee on Mental Retardation, 1st meeting, 7047
 union conventions, 1967, list, 14306
see also names of conferences, etc.—*also* subject of conference.
 Confessions (law):
 admissibility in evidence, hearings, 15166
 Confessions:
 atmospheric probe, stability and drag characteristics at Mach numbers, 9894
 come, blunt 120°, low subsonic and dynamic stability characteristics, 6893
 cone-cylinder-frustum-cylinder, aerodynamic characteristics, linear load distributions, 9804
 configuration geometry, effects on supersonic aerodynamic characteristics of launch vehicle, 5239
 conical reentry, subsonic longitudinal aerodynamic characteristics, 2701
 diamond-cross-section delta-wing, hypersonic performance, 9884
 dual tandem, longitudinal aerodynamic characteristics in ground effect of large scale, V/STOL model with 4 tilting ducted fans, 18045
 4-propeller tilt-wing, ground effects over fixed and moving ground plane, 11504
 general, Apollo wind tunnel testing program, historical development, 2722
 highly redundant structural, improved computer program for elastic analysis, 17960
 jet pluming effects on static stability of ballistic bodies at Mach number of 6.00, 2691
 low-speed dynamic-model investigation of Apollo command module configurations in Langley spin tunnel, 14452
 memory word line configuration allows high storage density, 6780
 modifications, effects on aerodynamic characteristics of tension shell shapes, 14475
 paraglider, having large tapered leading edges and keel, free-flight drop-test, 1475
 system enables dimensional inspection of very large structures, 14422
 variable-sweep wing-fuselage, effect of skewed wing-tip controls, 8487
see also Tension shells.
 Confinement facilities, *see* Disciplinary barracks.
 Congo (Brazzaville):
 background notes, 15759
 labor conditions, 1370
 Congo (Kinshasa):
 agricultural commodities, agreements, 5535, 11840
 labor conditions, 1371
 Congo (Léopoldville):
 agricultural commodities, agreement, 2886
 mineral industry, minerals yearbook chapter, 12800
 Congress, Joint Committee on Organization of:
 continuation, reports, 4519, 4595
 hearings, 4459
 Congress of United States:
 code of Federal regulations, 16586
 concern with research and development, bibliography, 4641

Congress of United States—Continued
 congressional record—
 daily, 3131-32
 89th Cong., 1st sess., bound volumes, 5965-66
 daily digest, 4456
 index, 9029
 89th Cong., 2d sess., bound volumes, 13470-471, 14883, 16113-118, 17485
 date of meeting, 90th Congress, law, 418
 directory—
 official edition, 90th Congress, 1st sess., 7586
 pictorial, 90th Congress, 5969
 District of Columbia representation, amend U.S. Constitution, hearings, 15044
 enactment of law, procedural steps, 13720
 joint activities, appropriations, 1968, legislative—
 law, 13537
 reports, 10617, 13672, 13813
 legislative reorganization act of 1946, amend, report, 10754
 legislative reorganization act of 1967, report, 4590
 major legislative actions, 90th Congress, 9047, 10494, 13548
 members, franked mail covers, amend United States Code, hearings, 17607
 monopoly problem, antitrust field, 1890-1966, history of congressional action, 4561
 organization, hearings, appendix, 4459
 reports to be made to Congress, list, 4485
 Republican report, 89th Congress, 2d session, supplement, 4572
 summary of legislative record and digest of major accomplishments, 89th Congress, 2d session, 767
 women of 90th Congress, biographies, 14728
see also Congressional documents—Senate.
 Congress, Special Committee on Organization of, Senate:
 establish, hearing, 961
 extension, reports, 9278, 12374
 report, 4590
 Congressional committees:
 hearings, Jan. 3, 1963-Jan. 3, 1967, index, 13472
 Investigating staffs, payment of compensation, report, 7681
 Senate, list and assignments of Senators, 758, 9179
 Senate subcommittees, select, joint, and special committees, list, 7766
 Congressional directory, *see* Congress of United States.
 Congressional districts:
 90th Congress—
 atlas, 1858
 identification of counties and selected places, 4356, 16029
 population, 4301
 redistricted States, 183, 1886-88
 redistricting standards, establish, reports, 9121, 9126, 10793, 13657, 17573
 Congressional documents, numerical lists and schedule of volumes, 89th Congress, 2d session, 10036
 Congressional record, *see* Congress of United States.
 Congressional serial set, 247-249, 1967-69, 4458, 7587, 10473-475, 12141-142, 16119-121, 17486-489
 schedule of volumes, 89th Congress, 2d session, 10036
 Confers:
 for western Iowa, 8107
 mixed clearcuttings, regeneration on Apache National Forest, Ariz., 11126
 regeneration in southeast Alaska, effects of slash burning, 4834
 snow damage to seedlings and saplings, 1091

INDEX 1967

- Conifers—Continued
young-growth mixed stands, clearcut harvesting costs and production rates, 4841
Conjugate-pair feed systems, 5360
Conkle, J. P., contaminants produced by man in space cabin simulator, 11955
Conkle, M. Thompson, winter injury among white fir seedlings, 14107
Conklin, Maxwell R., address, Oct. 4, 1966, 181
Conklin, Paul, good day at Rough Rock, 9400
Conley, Michael C., Communist insurgent infrastructure in South Vietnam, organization strategy, 13298
Conneaut, Ohio :
improvement of harbor, engineer report—departmental edition, 2208
document edition, 2000
Connecticut :
area measurement reports, 7456, 10335
census of agriculture, 1964, State and county statistics, 7502
census of manufactures, 1963, area statistics, 1852
census of mineral industries, 1963, area statistics, 4282
cities, housing codes and their enforcements, 14852
county business patterns, 10347
electric rate book, 11019
Connectors (electric) :
abraded cadmium-plated cable, repaired by conversion coating, 6746
clamp provides efficient connection for high-density currents, 11469
connector for saturated standard cells, 11590
cracks in glass electrical connector headers removed by dry blasting with fine abrasive, 12886
edge-type, evaluated by electrical noise measurement, 11462
feed-through connector couples rf power into vacuum chamber, 8386
metal boot permits fabrication of hermetically sealed splices in metal sheathed instrumentation cables, 6700
plug-in connector socket accepts coaxial cable end, 5144
posts, splices and terminals, Federal item identification guide, 10892
soldering electrical connections, handbook, 15517
substituting gold for silver improves electrical connections, 15528
thermocouple-flexible cable connector insulator is highly reliable, 8403
use as quick coupling in coaxial cable applications, 6783
weld joint damage, test device prevents by eliminating axial pin forces on modules, 17970
Connectors (tube) :
orbital tube flaring system produces tubing connectors with zero leakage, 8454
Connell, Michael L., paper, May 1966, 10049
Conner, Alton R., relief, 829, 9260, 13503, 13568
Conner, Caryl, pills please, 1011
Connor, John T. :
addresses, etc.—
Sept. 28, 1966, 241
Oct. 27, 1966, 240
Oct. 28, 1966, 223
Oct. 31, 1966, 239
Nov. 3, 1966, 242, 1960
Nov. 15, 1966, 1957, 1959
Nov. 16, 1966, 1958
Nov. 22, 1966, 1954
Nov. 29, 1966, 1956
Nov. 30, 1966, 1937, 9010
Dec. 14, 1966, 4450
Dec. 19, 1966, 4449
Dec. 21, 1966, 1955
1967 outlook and 1966 year-end economic review, 4430
Connor, Laurence N., Jr. :
centered 1-dimensional unsteady expansion of—
reacting gas mixture subject to vibrational and chemical nonequilibrium, 6891
vibrationally relaxing nitrogen-oxygen mixture, 6858
Connors, D. R., identification of fission product nuclides for radiological dose calculations, etc., 13349
Connors, Mary M., effect of wavelength and bandwidth of red light on recovery of dark adaptation, 14318
Connors Pass quadrangle, Nev., geology, 16694
Conscription :
in pursuit of equity, who serves when not all serve? report of National Advisory Commission on Selective Service, 7045
local board memoranda, 3521
selective service—
act, compilation, 1993
act of 1967 :
law, 13527
reports, 10608, 12246, 12555
classifications, taking appeals from, 15728, 17193
college qualification test, bulletin of information, 5486
extending draft authority, etc., recommendations, message from the President, 7605
manpower implications, hearings, 10862
program, evaluation, 11786-788
regulations, 3871
short course, 17192
selective service (periodical), 3870
universal military training and service act, amend and extend, hearings, 9304, 10638
report, 10744
you and the draft, 13113
Consells pratiques a l'intention des non-résidents, concernant les formalités douanières aux Etats-Unis d'Amérique, 15179
Conservacion del suelo y del agua en el mundo, 14653
Conservation, *see* Natural resources—Soil conservation—*also* subjects.
La conservation du sol et des eaux dans le monde, 14653
Conservation notes, 15255
Conservation research reports, 10, 4088, 11923
Consolazio, C. Frank :
energy, nitrogen, and water requirements of normal adults residing at 4300 meters for 28 days, 14806
metabolic aspects of acute starvation in normal humans—
performance and cardiovascular evaluation function, 121
ten days, 122
nutrition survey, Fort Huachuca, Ariz., 14807
respiratory function in normal young adults at 3475 and 4300 meters, 5753
Consolazio, William V., dynamics of academic science, 14560
Conspiracies, organizational conspiracies act, report, 16250
Constitution of United States :
amendments—
District of Columbia representation in Congress, hearings, 15044
House of Representatives 4-year terms, hearings, 12417
investigation—
authorization, report, 4618
report, 10730
constitutional rights—
American Indian, hearings and investigations, summary report, 12414

Constitution of United States—Continued
 constitutional rights—continued
 investigation—
 authorization and expenses, report, 6069
 subcommittee activities, report, 15085
 protect Federal employees—
 hearings, 7822
 report, 15121
 constitutional separation of powers between executive, judicial, and legislative branches of Govt., study, authorization, report, 4621
 enforcement of establishment and free exercise clauses of 1st amendment, report, 10729
 our Constitution and Government. Federal textbook on citizenship, 12631-632, 14191, 15320
 text, 7593, 10691
 print as House documents, reports, 10588, 10784
 with analytical index, unratified amendments, 13553
 Constitution Week, bulletin, 14189
 Constitutional rights, *see* Constitution of United States.
 Construction, *see* Building—Building trades
 — Construction industry — Earthwork and structures — Installations (military) — Roads and highways.
 Construction equipment, *see* Building machinery.
 Construction industry:
 construction activity, reports, 3134
 construction authorized, Washington, D.C., area, 3133
 construction reports, 3133-39, 4305, 5850, 8937, 14818
 heavy, work injuries and work injury rates, 17890
 labor standards provisions for Public Health Service grant programs, 8637
 projects, common situs picketing—
 hearings, 10648
 report, 10576
 safe work guides, 11302-306
 safety training programs, instructor outline, demolition, 1357
 under fair labor standards act, as amended, 2069
 USSR—
 plans improvements in production and technology, 8239
 trends, 4984
 Construction machinery, *see* Building machinery.
 Construction mechanic 3 & 2, Navy training course, 7013
 Consults:
 convention with France—
 report, 16352
 text, etc., 9184
 convention with Soviet Union—
 hearings, 6103
 report, 6067
 foreign consular offices in United States, 10097
 U.S. despatches, microcopy, pamphlet to accompany, from Matamoros, 18060
 Consultants, safety in industry, instructor outline, consultative approach for safety promotion, 16797
 Consumer Advisory Council, consumer issues, report, 5405
 Consumer Affairs, Office of Special Assistant to the President for, *see* Special Assistant to the President for Consumer Affairs, Office of.
 Consumer and Marketing Service:
 appropriations, 1968, hearings, 10629, 12397
 C&MS series, 963, 2135-36, 6129-31, 7829-37, 9333-53, 10873-876, 16442-443

Consumer and Marketing Service—Con.
 career opportunities, agricultural commodity grader, 9356
 costs of transporting donated commodities to State agencies, GAO report, 4572
 distribution of Government-donated food commodities in Pennsylvania, GAO report, 6381
 publications, available, 6129
 service and regulatory announcements, 964, 6132
 services for you, 1711
 USDA-C&MS visual aid series, 4662, 13901
 Consumer credit, *see* Credit—Installment credit.
 Consumer finance companies, *see* Finance companies.
 Consumer goods, *see* Commercial products.
 Consumer income, *see* Consumers—Income.
 Consumer Interests, President's Committee on, *see* President's Committee on Consumer Interests.
 Consumers:
 better income for farmers, balanced abundance for consumers, 11938
 buying indicators, series, 1878, 5884, 14832, 16027
 buying intentions, automobiles, etc., 1878, 5884
 confidence through advertising (remarks), 241
 consumer issues, report, 5405
 consumer relations newsletter, 3146
 education, pennywise teenagers, 15215
 expenditures and income, 1960-61, tables—
 rural farm, 2522
 rural nonfarm areas, 2493
 urban, 2492
 urban and rural, total, 2494
 FDA radio-TV packet (periodical), 3804
 Federal consumer services, guide, 13064
 HUD consumer bulletins, 2384, 4901, 4903-4, 6422-28, 8197, 11199-203, 12623-624, 12626, 16708, 17838
 income, average family, 16026
 installment credit, slowdown, etc., 7997
 interests of the elderly, hearings, 9300
 price index—
 city average and selected items, 3143
 history and techniques, 2500
 selected items and groups, 3144
 short description, 15451
 technical notes, 15449
 protection—
 Government program (address), 6588
 how FDA works for you, 4815
 publications, list, 8206
 purchases of citrus fruit, juices, drinks, and other products (periodical), 3145
 response to various levels of advertising for fluid milk, 17322
 saving size and composition, 6304
 science and consumers, 15840
 service, USDA's report (periodical), 3873
 services for you from USDA's Consumer and Marketing Service, 1711
 Consumption (economics):
 selected materials consumed, 1963 census of manufactures, 4277
see also Food.
 Contacts (electric), *see* Electric contacts.
 Contagion and contagious diseases:
 morbidity and mortality weekly report, 3585
 publications, price list, 2801
 Soviets concern, 6540
 Yugoslavia, current state of infectious diseases and organization problems in preventing and counteracting them, 15400
 Contagious pleuropneumonia still threat to U.S. cattle, 10190
 Containers:
 biochemical fluid containers, self-sealing closure enables access, 14417
 closures, current industrial reports, 3169, 13388

INDEX 1967

Containers—Continued
 container developments in transportation industry (remarks), 16578
 containerization for coordinated intermodal system of transportation (remarks), 7968
 containerization problems and benefits (remarks), 7969-70
 coverings for liquified-gas storage containers, USSR study, 15403
 customs convention, report, 6066
 cylindrical, partially liquid-filled, axisymmetric vibrations, 12942
 elastic, liquid sloshing in, 16906
 Federal item identification guides for supply cataloging, supplements, 3287
 flexible, visual aids for inspection, 13901
 glass, current industrial reports, 3169, 12071
 industry report, 3147
 low-level radioactive waste, structural integrity, 8909
 metal, visual aid for inspection, 4662
 ocean transport capability, container/barge quandary (paper), 12785
 rigid and semirigid, visual aids for inspection, 13900
 seal-off assembly permits rapid evacuation of air, 1450
 standard acts of 1916 and 1928, repeal—hearings, 754, 4636
 report, 889
 standard sizes suggested by voluntary industry associations, role of Government, hearings, 17648
 triple wall and double wall fiberboard, AMC pamphlet, 4192
see also types of containers.

Contaminants:
 microcontaminant studies in sealed environments, infrared spectrophotometry utilization, 869
 produced by man in space cabin simulator, 11955
 trace, in water, analytical technique for characterizing, 15532

Contamination:
 americium-beryllium capsules, apparatus prevents contamination, 14366
 analysis of samples by microwave spectroscopy for trace contaminants collected by space simulator, 5711
 environmental testing of contaminant producing materials from integrated life support systems, 11416
 trace contaminants contained in samples from closed environment at 258 mm.hg. analysis, 10234
 traced contaminants in closed ecologic atmospheres, 7350
 valve effectively controls amount of contaminant in flow stream, 6838
see also Air pollution.

Contested elections:
 Love *vs.* Thompson, dismissal, etc., report, 12270
 Mackay *vs.* Blackburn, report, 12271

Contests, *see* Names of contests, or subjects involved.

Continental Shelf:
 Atlantic geologic background, 4889
 drilling on continental margin off Florida (series), 15311
 outer Continental Shelf lands act, regulations governing administration, 1019
 scientific and industrial research problems, USSR study, 8278
 seismic reflection profiles along drill holes on continental margin off Florida, 15311
 Contingency planning for U.S. international monetary policy, 4461

Contract Administration Services, production manual, 16461

Contract Appeals Board, decisions, 3427

Contract Appeals, Corps of Engineers, Board of, *see* Engineers Corps Board of Contract Appeals.

Contractions, *see* Abbreviations.

Contractor report NASA CR (series), 1419-36, 2595-2613, 5157-58, 6706-28, 8405-29, 9799-9820, 11396-422, 12847-876, 14371-401, 15497-512, 16890-920, 17933-947

Contractors:
 data and reports, management, 5702
 how to do business with GPO, guide, 8188
 interstate farm labor, registration, general information, 6203
 NASA guidelines for evaluation of contractor accounting systems, 6705
see also Government contracts.

Contracts:
 exclusive territorial franchise bill, hearings, 7817
 franchising agreements, effect on small business, hearings, print additional copies, reports 916, 2030
 insurance, for medical care, recovery of excess funds accumulated, GAO review, 8145
see also Collective bargaining—Government contracts.

Contributions of science and technology to Federal crime insurance, 16437

Control (vehicle), *see* Aircraft—Airplanes—Motor vehicles—Satellites—Spacecraft—Wings (aircraft).

Control apparatus for spectral energy source, 18004

Control circuit ensures solar cell operation at maximum power, 9832

Control of dynamics of 2-phase liquid-gas weightless medium with aid of surface effects, 11562

Control of movements in man, 12690

Control structure, Little Sioux River, Iowa, hydraulic model investigation, 7931

Control systems:
 and bionics, USSR study, 1323
 attitude, equilibrium analysis and application to, 14499
 attitude stability acted upon by random perturbations, 11399
 automatic—
 determining courses of study, 1017
 frequency, responding to Doppler frequency shift, synthesis, USSR study, 16742
 industrial application, 6509
 regulation of problems in statistical dynamics, USSR study, 11244
 searchless, adaptive variable structure, principle of construction, USSR study, 4933
 specific requirements, USSR study, 4958
 bypass air flow for supersonic mixed-compression inlet, analysis, 12946
 contractor data and reports, management, 5702
 cybernetics and control theory, USSR study, 5021
 cybernetics in system of control sciences, USSR study, 9660
 design using analog fluidic devices, 15955
 digital, adaptive, theoretical and experimental research, 5170, 14378
 electronic flight, lunar-landing research vehicle, operational experience, 1496
 engineering aspects of design via direct method of Lapunov, 5165
 environmental, for Project Mercury, technical history, 18009
 fluid flight path, study, 16890
 gaseous, for nuclear reactor, 14485
 integrated display and control systems, simulator evaluations, 14374
 integration of control equations and problem of small time constants, 8505
 manual control, NASA-University Conference, papers, 6733
 measuring human performance with parameter tracking version of crossover model, 17944

Control s
 multiva
 deco
 manu
 sys
 noallne
 nuclear
 erati
 oculom
 by e
 on-off
 tem
 vehic
 optima
 passive
 possi
 princip
 biolo
 1322
 reactor
 ing
 gran
 self-or
 solid
 valv
 solid
 nals
 can
 space
 128
 spaced
 hor
 v
 r
 steerin
 veh
 stick
 trac
 517
 theor
 theru
 ing
 therm
 dev
 use o
 flas
 tro
 USSR
 con
 vestit
 spu
 see a
 Control
 herbi
 Convec
 Conven
 Deaf
 as Sc
 Conven
 Conven
 Conver
 latio
 7248
 Conver
 dersi
 Conver
 and
 Conver
 conv
 vert
 Convol
 manu
 sl
 st
 tissu
 co
 re
 Cook,
 qual
 Cook,
 leaf

Control systems—Continued
multivariable—

- decoupling, design and synthesis, 18046
- manual, studies, 2-axis compensatory systems with separated displays and controls, 17934
- nonlinear, technique developed, 6725
- nuclear rocket engine at power range operating conditions, analysis, 11525
- oculometer developed to control machine by eye, 14376
- on-off rate command attitude control system of manned lunar-landing research vehicle, flight-test evaluation, 9888
- optimal and adaptive control theory, 8414
- passive communications satellites, orbit position control, handbook, 11398
- principles of control sciences applied to biology and medicine, USSR studies, 1322
- reactor, based on counting and Campbell-ing techniques, instrumentation program, 7422
- self-organizing, USSR study, 9617
- solid propellant rocket engines, vortex valve study, 2651
- solid state circuit averages multiple signals and rejects those varying significantly from the average, 15492
- space vehicle, flight, analysis and design, 12871-876, 14383-384, 15497-503
- spacecraft, 6750
- horizon sensors accuracy, provide for vertical reference in earth's horizon radiance profile, 9802
- steering, energy absorbing, for automotive vehicles, Federal standard, 6318
- stick stiffness, experimental effects in tracking task for man-machine research, 5174
- theory, USSR study, 4932
- thermal, considerations for manned orbiting space station, 11538
- thermionic diode controlled power system, development, 1433
- use of displacement, flash, and depth-of-flash coded displays for providing control system information, 5354
- USSR computer centers and automatic accounting and control systems, 1340
- vestibular system and human dynamic space orientation, 1428
- see also* Feedback control systems.
- Controlling cull oila trees by injecting herbicides, 8088
- Convection of heat, *see* Heat transfer.
- Convention of American Instructors of the Deaf, proceedings of 43d meeting, print as Senate document, report, 16363
- Conventions, *see* Conferences, congresses, etc.
- Conventions and treaties, *see* subjects.
- Converse, Harry H., two-fan crossflow ventilation system for upright grain storages, 7248
- Converse, Henry T., Jr., soil survey of Henderson County, Ky., 8698
- Converse, Richard H., diseases of raspberries and erect and trailing blackberries, 1681
- Converters (electric), *see* Electric current converters—Frequency-to-analog converter—Upconverters.
- Convulsions:
 - man and experimental animals in convulsive states, USSR electron microscopic study of cerebral cortex, 12752
 - tissue monoamine oxidase inhibitions by convulsogenic doses of hydrazines and related B-hydrazones, 4181
- Cook, Charles R., printing and publishing, quarterly industry report, 3770
- Cook, William C., life history, etc., of beet leafhopper in western U.S., 5686

Cook Inlet:

- region, Alaska—
 - Tertiary biostratigraphy (series), 2365
 - Tertiary plants, 2365
- Cooke, Julian P.
 - behavioral changes in rats at ground level following gestation and growth in 100% oxygen at reduced pressures, 15899
 - heart rate response of anesthetized and unanesthetized dogs to noise and near-vacuum decompression, 4180
 - rapid decompression and exposure of fresh foods, 1735
 - some cardiovascular responses in anesthetized dogs during repeated decompressions in near-vacuum, 78
- Cooke, Marian I., distribution of Pennsylvania anthracite, 5102
- Cookery, publications, price list, 17132
- see also* Recipes.
- Cooling appliances, current industrial reports, 3169, 5863
- Coolants:
 - factors influencing heat transfer to liquid-propellant rocket-thrust-chamber coolant channels, 1484
 - nuclear power engineering installations, USSR study, 1260
 - see also* names of coolants.
- Cooldown characteristics of regenerative nozzle used in full-scale, cold-flow, nuclear rocket test facility, 11500
- Coolies, *see* Chinese—Japanese.
- Cooling:
 - combustion chamber struts can be effectively transpiration cooled, 6805
 - effect of subcooling on film-boiling heat transfer from flat plate, 14453
 - gaseous-film cooling of rocket motor, 6882
 - regeneratively cooled hydrogen-fluorine rocket engine, heat-transfer study at low chamber pressure, 17006
 - transient, of opaque sphere in space, theoretical solution of nonlinear problem, 14458
 - see also* names of commodities.
- Coombs, Charles A., Treasury and Federal reserve foreign exchange operations, 8005, 16599
- Cooper, Anna G., carbon monoxide, bibliography, with abstracts, 1589
- Cooper, Dale W., measurement of ion and electron densities of electron-bombardment ion-thruster beam, 5244
- Cooper, David, nobody wanted school desegregation, Moore County, N.C., did it in quiet sensible way, 15213
- Cooper, G. Arthur, Permian rock units in Glass Mountains, west Texas, 1113
- Cooper, Glenn A., wood brick tile for paneling, 14133
- Cooper, James D., clays, 2534
- Cooper, Paul A., vibration and buckling of prestressed shells of revolution, 6878
- Cooper Union Museum, treasures, exhibition catalogue, 12990
- Cooperation, *see* International cooperation.
- Cooperative Extension Service, general information, 17328
- Cooperative extension services in District of Columbia, 16387
- Cooperative housing, *see* Housing.
- Cooperative research monograph series, 2186
- Cooperative State Research Service, appropriations, 1968, hearings, 10629, 12397
- Cooperatives:
 - agriculture, 1954-64, selected references, 1517
 - books on, general reading list, 12977

INDEX 1967

Cooperatives—Continued
cooperative ventures in urban America, 14187
development under foreign assistance act of 1961, report, 13700
fishery cooperatives in United States, list, 14058
food chains, bibliography, 10077
over-all objective of helping people to live better (remarks), 1696
retail and wholesale, census of business, 1963, retail trade, 5817
role in developing countries, ILO recommendation text, 13554
self-help technique of cooperation (remarks), 1694
status today and tomorrow, 2232
see also Farmers' cooperative organizations—*also* kinds of cooperatives—*also* names of commodities.

Coordinates:
Brendel's, use in numerical theory of satellites, 11545
curvilinear coordinate systems, application of computers to formulation of problems, 9906
modifications in Brouwer's theory of general perturbations in rectangular coordinates, 2703
point, on photograph, laser measuring system accurately locates, 5154

Coordinating Research Council (CRC) aviation handbook, fuel and fuel systems, 11624

Coordinator's scoreboard, review of what's new in placement of handicapped, 8990

Coats:
hunting, possession, etc., Federal regulations, 1080, 16623
in Alaska, 14061

Copeland, W. Latham:
contribution of downstream stator to interaction noise of single-stage axial-flow compressor, 9882
noise measurement evaluations of various take-off/climbout profiles of 4-engine turbojet transport airplane, 2699

Copepods:
bathypelagic calanoid, of western Indian Ocean, 8548
Calliniae genera key, 15607
caligoid, parasitic on sharks of Indian Ocean, 6958
Caritus, new genus of caligoid copepod, 15607
cyclopoid, associated with—
alcyonarian coral *Tubipora musica* (Linnaeus) in Madagascar, 6959
Madagascar corals *Psammocora contigua* (Esper), 6965
family Pandaridae (Copepoda: Caligoida), revision, 5314
genus *Gloioptotes* and new species, host, specificity, etc., 11607
parasitic on teleost fishes of Hawaiian Islands, 11603
taxonomy, distribution, and polymorphism in Labidocera jollae group with remarks on evolution within group (Copepoda: Calanoida), 8544
see also Crustaceans—Eurytemora.

Coplin, John E., relief, 13585, 13787, 14904

Copolymers, see Polymers and polymerization.

Copper:
acrylic enamel serves as lubricant for cold drawing of refractory metals, 5140
alloys—
failure under microimpact action, rules governing, USSR study, 12714
ultrasonic effects on electrodeposition from cyanide electrolytes, 9787
artifacts, neutron activation analysis traces to geographical point of origin, 8388

Copper—Continued
braze bonds, correlation established between heat transfer and ultrasonic transmission properties, 8389
compounds, electron paramagnetic resonance and magnetic susceptibility with dicarboxylic acids, USSR study, 14252
copper and alloys, corrosion in tropical environments, 9993
copper and copper base alloy mill products, tolerances, Federal standard, 2268, 16601
deposit, Ore Knob, N.C., 15310
friction of copper-aluminum alloys, possible relation with stacking-fault energy, 8490
friction studies, recrystallization and preferred orientation in single-crystal and polycrystalline copper, 8481
high-strength braze joints between copper and steel, 14420
hose, flexible, protected by plastic tubing, 6755
industry—
mineral industry survey, monthly, 3149
quarterly report, 3150
report, annual statistical supplement, 12027
mill and foundry products, current industrial reports, 3170
ores, domestic reserves and potential sources, evaluation, 8340
scrap, consumers, mineral industry survey, monthly, 3151
stress-rupture and creep properties of tungsten-fiber-reinforced copper composites, 17002
tungsten fiber-reinforced copper composites form high strength electrical conductors, 2678
Copper mosses as indicators of metal concentrations, 4886
Copper River and Valley, basin area, earthquake of Mar. 27, 1964, effects, 2371
Copper sulfate, mineral industry survey, monthly, 3152
Copple, R. F., vegetative key to some common Arizona range grasses, 11141

Copying processes:
equipment, GSA handbook, 12595
office copying processes and equipment, military standardization handbook, 9371

Copyright:
catalog of copyright entries, 967-969, 2141, 10880, 12432-435, 13904, 16451-452, 17682-685
code of Federal regulations, 9477
law, revision—
hearings, 1645-46, 16421, 17660
reports, 7083, 9107
subcommittee work, reports, 9285, 13789

Copyright Office:
circulars, 13905
general information, 13905
Register of Copyrights, annual report, 13903

Corals:
new cyclopoid copepods associated with alcyonarian coral *Tubipora musica* (Linnaeus) in Madagascar, 6959
Otter Creek coral bed and its fauna, east-central Kentucky, 6394
Psammocora contigua (Esper), in Madagascar, associated with cyclopoid copepods, 6965
Corbett, Cora L. F., relief, 7632
Corbett, Edward S., soil slippage increased by brush conversion, 11120
CORD, commissioned officer residency deferment program, 8626
Cordaro, Joseph T.:
comparison of acetate differential agar with Sellers citrate-mannitol-agar, 10233
study of man in oxygen-hellum atmosphere, enteric microbial flora, 79

Cordwood,
Core drill
Core Florida
Cores (res
Corigliano
Corliss, C
of spec
14514
Corn:
bacteri
contr
futures
futures
growing
insect
harv
market
tion,
668
produc
protect
1663
shelled
gizee
cart
small
sweet,
tradin
see also
Corn bor
Corn ear
Corn gri
Corn me
Corned,
10242
Cornfield
Cornog,
chara
Corona
Coronag
cal
instal
Coronar
logic
Coronar
Coronar
Coroner
regist
Corozal
and T
Corp. I
grou
Corpas,
94
y Cor
Corpor
Publi
Corpor
Tele
Corpor
bank
un
94
corpe

Cordwood, *see* Wood.

Core drilling on continental margin off Florida (series), 15311

Cores (reactors), *see* Reactors (atomic).

Corigliano, Francesco, relief, 10551

Corliss, Charles H., revision of NBS tables of spectral-line intensities below 2450 Å, 14514

Corn: bacterial wilt and Stewarts leaf-blight, control, 5626

futures, commitments of traders, 3112

futures trading and open contracts, 3368

growing, 1693

insect damage in 3 southeastern States at harvest time and in farm storage, 14751

marketing by Commodity Credit Corporation, impact on small business, report, 668

production, 1682

protecting from blackbirds, methods, etc., 16637

shelled, evaluation of malathion, synergized pyrethrum, and diatomaceous earth as protectants against insects in small bins, 36

sweet, earworm control, 14747

trading in futures, 16112

see also Hominy grits.

Corn borers, *see* European corn borer.

Corn earworms, *see* Bollworm.

Corn grits, *see* Grits.

Corn meal, *see* Meal.

Cornea, frog, monomethylhydrazine toxicity, 10242

Cornfield, Wash., hydrology of area, 6412

Cornog, D. Y., legibility of alphanumeric characters and other symbols, 6917

Corona (solar), *see* Sun.

Coronagraphs, Kislovodsk main astronomical observatory, largest coronagraph installed, 15351

Coronary circulation in normal and pathologic heart, 11909

Coronary diseases, *see* Heart diseases.

Coronary drug project, 15678

Coroners, handbook on death and fetal death registration, 15695

Corozal quadrangle, Puerto Rico, Cretaceous and Tertiary rocks, 1112

Corp, Ernest L., flexible liners for underground support, 5128

Corpas, Miguel A. Martinez y, *see* Martinez y Corpas, Miguel A.

Corporation for Public Broadcasting, *see* Public Broadcasting Corporation.

Corporation for Public Television, *see* Public Television Corporation.

Corporations: banking and financing foreign operations under Federal reserve act, regulations, 9495

corporate equity ownership of securities under securities exchange act of 1934, full disclosure—

hearings, 13846

report, 15133

corporate reorganization releases, SEC, 3153

District of Columbia income and franchise tax act, amend, reports, 879, 893

doing foreign banking or financing that maintain reserve accounts with Federal reserve banks, list, 6305

income tax returns, statistics, 6461, 15337

foreign tax credit claimed, 11224

industrial, U.S., 500 largest, 1954-65, concentration and divisional reporting, etc., Fortune directory, hearings, 12415

lenders from jurisdictions outside D.C. making loans secured by D.C. property, clarify status under income and franchise tax act, report, 879

manufacturing, quarterly financial report, 3794

Corporations—Continued

monetary policy, financial liquidity, and outlook for corporate profits (remarks), 11056

pension funds, issues raised by 1965 report of President's Committee (remarks), 10123

sales, profits, and dividends, quarterly report, 3847

tax policy developments in corporate area (remarks), 7215

Corrals, beef cattle, farm building plan, 4125

Correctional institutions, *see* Reformatories.

Correctional officers, Federal Prison Service, examination announcement, 7541

Correctional rehabilitation, *see* Rehabilitation of criminals.

Corrective action, *see* Discipline.

Corrective therapists, Veterans Administration, hospitals and clinics, nationwide, career opportunities, 15816

Corregidor-Bataan Memorial Commission: annual report, 4468

termination date, extend—

hearing, 9155

reports, 9131, 10742

Correlation (statistics): free-surface instability, open-channel flow, 4892

friction coefficients for laminar and turbulent flow with ratios of surface to bulk temperature, 17014

Correlation function measurement and infrared frequency devices, new patents, USSR, 9647

Correspondence, aids, CA series, 10157, 17301

Correspondence schools and courses: Industrial College of Armed Forces—

management in Department of Defense, information booklet, 9607

national security management, information booklet, 2422, 7863

program of studies, 9606

Navy, training manuals and correspondence courses, lists, 11657, 14555

USSR, correspondence and evening higher educational institutions, prospects, 1164

Corrosion and anticorrosives:

aluminum alloys, treatment increases stress-corrosion resistance, 6760

beryllium fluoride film protects beryllium against corrosion, 8459

corrosion and wear, bibliography, 2621

corrosion in hot sea water in experimental loop apparatus, 15326

corrosion of aluminum in water, 17938

corrosion resistance of stainless steel and nickel alloys, 9797

corrosion test program, 9594

degreasing of titanium to minimize stress corrosion, 11476

electron optical survey of iron oxide films produced in H₂O, LiOH and LiOH/EDTA solutions, 8594

kinetics of thermogalvanic corrosion, USSR study, 1241

liquid- metals AEC-NASA information meeting, 125

magnesium-lithium alloys, coating protects against corrosion, 11477

metallic, trace levels determined by emission spectroscopy, 6850

metals in tropical environments, 9993

positive displacement cylinder measures corrosive liquid volume, 6756

steel, corrosion resistant, controlled ferrite content improves weldability, 8475

stress-corrosion cracking of Ti-6Al-4V alloy in methanol, 6900

stress corrosion cracks in titanium alloys revealed by chemical milling solution, 16957

titanium alloys, salt water stress-corrosion cracking characteristics, 17091

INDEX 1967

Corrosion and anticorrosives—Continued
 titanium tanks, glass bead shot peening
 retards stress corrosion failure, 14413
 variable reluctance switch avoids contact
 corrosion and contact bounce, 11466
 zirconium alloys with small amounts of
 iron and copper or nickel show im-
 proved corrosion resistance in super-
 heated steam, 9796
 Corrosion engineers, problems in training,
 Hungarian study, 12710
 Corsets, current industrial reports, 14825
 Corso, Anthony J., relief, 9261, 13564, 14894
 Cortisol, *see* Hydrocortisone.
 Cortright, Edgar M., remarks, Mar. 14, 1967,
 8514
 Cosine law in kinetic theory of gases, 9928
 Cosmetics:
 food, drug, and cosmetic act—
 as amended, text, 1083
 enforcement and compliance, FDA re-
 port, monthly, 3268
 requirements guide for foreign manu-
 facturers, etc., 17790
 import detentions, report, 3820
 Cosmetologists, *see* Beauty operators.
 Cosmonauts, what should cosmonauts
 breathe? USSR study, 5019
 Cosmos satellites in near-earth orbits, USSR,
 5017
 Cost, Noel D., pulpwood prices in southeast,
 2319
 Cost:
 actual versus allocated costs, computer/
 PERT technique monitors, 3458
 analysis project in children's institutions,
 7231
 benefit-cost analysis, transportation sys-
 tem, 1525
 commercial cotton farms, costs and re-
 turns, 986
 data requirements in award of contracts
 and subcontracts, Defense Dept., GAO
 report, 4867
 farm cost situation, 994
 farm costs and returns, 986, 13943,
 16488-490
 commercial dairy farms, northeast and
 midwest, 16488
 commercial egg-producing farms, New
 Jersey, 16489
 commercial tobacco farms, Coastal
 Plain, North Carolina, 13943
 commercial tobacco-livestock farms,
 Bluegrass area and Pennyroyal area,
 Ky.-Tenn., 16490
 indirect, establishing rates for HEW re-
 search grants, etc., guide for educa-
 tional institutions, 8189, 12620
 information from contractors, procedures
 for reporting, 9929
 reduction actions by defense contractors,
 4670
 reduction journal, Defense Dept., 3154
 reduction report, Defense Dept., 3154
 reductions, Veterans Administration, 5587
see also subjects.
 Cost accounting, *see* Accounts and account-
 ing.
 Cost and standard of living:
 city worker's family budget for moderate
 living standard, 17894
 cost-of-living adjustments in Lighthouse
 Service annuities, report, 12253
 farm operator level-of-living indexes for
 counties of United States, 13250
 living costs abroad, Department of State
 indexes, 5084
 patterns of living and housing of middle-
 aged and older people, research con-
 ference proceedings, 14634
 rural people in American economy, 983
 Costa Rica:
 background notes, 15754
 economy, basic data, 7578
 mineral industry, minerals yearbook chap-
 ter, 14331

Costa Rica—Continued
 records of Dept. of State, microcopy,
 pamphlet to accompany, political rela-
 tions with U.S., 18066
 Costumers, wood, executive office, Federal
 standard, cancellation, 6309
 Cote, Joseph, or heirs, relief, 610
 Cotroneo, Anthony P., characterizations of
 real linear algebras, 6598
 Cotton:
 Australia, recent developments, 2286
 boll, fiber, and spinning properties, as af-
 fected by management practices, 11945
 Brazilian, trends and prospects, 9525
 broad woven goods, current industrial re-
 ports, 3170
 cloth, prices of cloth, raw cotton, and
 mill margins, etc., 3562
 commercial cotton farms, 1965, costs and
 returns, 986
 cotton and related data statistics, 1925-
 62, 1966 supplement, 53
 cotton situation, 3161
 different grades and staple lengths from
 same load of cotton, 10192
 extra-long staple, global import quota,
 amend law—
 hearings, 1552
 reports, 13683, 13687
 fiber and processing test results, 3155
 fiber problems and policies in U.S., 15666
 fiber quality, effects on efficiency of grid-
 bar air wash lint cleaners, 14759
 fibers, fibrosampler and digital fibrograph
 for sampling, and measuring length
 characteristics, evaluation, 8834
 foreign agriculture circulars, 3345
 futures trading and open contracts, 3366
 ginning to preserve fiber quality, 16568
 imports of manufactures, foreign trade re-
 ports, 3352
 inventory management by Commodity
 Credit Corporation, GAO follow-up re-
 view, 15297
 Kirgiz, child labor in fields, deplorable,
 USSR study, 1172
 man-made fiber staple, and linters, current
 industrial reports, 3169
 mill margins report—
 expanded series, 3561
 20-construction series, 3562
 monthly cotton linters review, 3571
 price statistics, monthly, 3159
 prices, spot quotations, 3892
 production, monthly release, 3160
 production, 1966 crop, 12040
 quality report for ginnings, 3997
 quality survey, fiber and processing tests
 from selected production areas, sum-
 mary, 7266
 research plots, quick change sacking at-
 tachment for harvesting, 13198
 San Joaquin Valley, Calif., spinning per-
 formances, comparison with varying
 fiber properties, 1964-65 season, 15860
 situations, actions taken to strengthen un-
 der USDA programs (address), 24
 spinning quality as affected by gin clean-
 ing, etc., Mississippi, 1965-66 season,
 5647
 squares, efficiency of flail-type machine in
 destroying, 7242
 storage, hearings, 10626
 storage costs, hearing, 16301
 story, 15858
 strainer for harvesting research plots, 3
 textiles—
 depth of cut in tariff rates, 6th round
 GATT trade negotiations, 13354
 International trade, protocol with other
 governments, extending long-term ar-
 rangements, 15796
 trade agreement with—
 China, Republic of, 2890
 Hong Kong, 2920

Cotton—Continued

- textiles—continued
- trade agreement with—continued
 - India, 8730, 8741, 13150
 - Israel, 11855
 - Korea, Republic of, 7183
 - Malta, 15785
 - Mexico, 15777
 - Pakistan, 11834, 13797
 - Poland, 11866
 - Portugal, 1639, 8739, 15766
 - Singapore, 2934
 - Spain, 7162
 - Turkey, 15786
- upland—
 - allotment program, statistical summary, 8820
 - cost of producing in United States, supplement, 16485
 - 1967 program, general explanation, 7291
 - USSR production, report of U.S. technical study group, addendum, 13245
 - varieties planted, 13855, 16444
 - varieties planted in early producing section of Texas, 12430
 - variety tests, regional, results, 4084
 - weekly cotton market review, 4056
 - see also names of manufactured articles and materials.
- Cotton, International Institute, see International Institute for Cotton.
- Cotton gins and ginning:
 - consolidated cotton report, 3156
 - cotton ginnings by counties, 3157
 - cotton ginnings by States, 3158
 - engineering and economic aspects of cotton gin operations, Midsouth, west Texas, Far West, 12452
 - gin trash collection efficiency of small-diameter cyclones, 15824
 - ginning to preserve fiber quality, 16568
 - pink bollworm kill, method of evaluating, 10147
 - quality report for ginnings, 3997
 - waste, marketing and utilization, 9390
 - wastes, control and disposal, symposium, 7063
- Cottonseed:
 - and products, transportation factors in marketing, 16546
 - quality, 1966 crop, 13886
 - U.S. industry adjusting to short 1966 crop, 989
- Cottonseed oil, futures trading and open contracts, 3366
- Cottonwood:
 - and willow, stored, relation of visual estimates of decay to specific gravity loss, 2299
 - responses of 1-year-old cottonwood to increasing soil moisture tension, 14122
- Cottrell, Wm. B., nuclear safety, quarterly technical progress review, 3645
- Couch, Lana M., heat-transfer measurements on flat plate with attached protuberances, 5232
- Coulombs, interaction, theory, 11567
- Coulter, Olivia W., aging, 2995, 14732
- Council of Economic Advisers:
 - act establishing, text, 10492
 - member, nomination of Arthur M. Okun, hearing, 7801
 - report—
 - departmental edition, 5406
 - document edition, 4486
- Counseling:
 - and vocational guidance services for New York City women, 5599
 - Army recruiting and career counseling journal, 3812
 - bibliography, Air Force Academy Library, 5689
 - girls and women, awareness, analysis, action, 13968
 - girls, their special needs for expanding opportunities, 11909

Counseling—Continued

- interest check list, instructions for administering and using, 16516
- national defense education act of 1958, institutes, programs, 6189
- progress interview, helps for management in counseling people about their work, 6373
- psychologist, examination announcement, 12113
- publications of State Departments of Education, guide, 6185
- report of President's Commission on Status of Women and report of Committee on Education, excerpts, 7236
- State Dept. of Education personnel directory, 6178
- T.I.D.E. [Testing, Information, Discussing and Evaluating], promising demonstration project, 7923
- work fields, counselor's interviewing guides in individual appraisal and counselee appraisal patterns, handbook, 7922
- Counselors:
 - desk aid, 18 basic vocational directions, summary information, 13969
 - development in American Society, Government-university relations in professional preparation and employment, conference recommendations, 2482
 - employment, interviewing guides in individual appraisal patterns related to fields of work, handbook, 7922
 - inventory of counselor education programs, 16504
 - recognizing and supervising troubled employees, guide for supervisors, etc., 14871
 - rehabilitation, medicine and medical practice, survey, instructor's manual, 10128
 - T.I.D.E. [Testing, Information, Discussing and Evaluating], diary, 1966 summer, 7923
 - Counter guerrilla operations, 8881
 - Counters, digital frequency counter permits readout without disturbing counting process, 6818
 - see also Electronic counters—Proportional counters.
- Counties:
 - agricultural committee system, extend benefits to employees—
 - hearings, 10870, 17609
 - report, 13807
 - county business patterns, bound volumes—
 - Alabama-Illinois, 17425
 - Indiana-Missouri, 17426
 - Montana-Oregon, 17427
 - Pennsylvania-Wyoming, 17428
 - U.S. summary, 17424
 - county business patterns, CBP series, 168—
 - 175, 1859-71, 4306-21, 5851, 7475, 10344-351, 12042-65, 13365-385, 14819-824, 15987, 17424-428
 - announcement and order form, 5852
 - county business patterns, U.S. summary, 7475, 15987
 - county veteran population, Dec. 1966, estimates by States, 17283
 - data book, 1967—
 - departmental edition, 12041
 - document edition, 12201
 - farm operator level-of-living indexes, 13250
 - health insurance enrollment under social security, 10083
 - land ownership maps, 19th century, in L.C. checklist, 16837
 - mental hospitals, patient movement, etc., 15697
 - rural, comprehensive plans for improving, 7265
 - see also subject involved.
- Counting devices, reactor control systems, based on counting techniques, instrumentation program, 7422

INDEX 1967

Countries, *see* Foreign countries.

Country life:
 alleviating conditions of rural poverty,
 gains and prospects, 5674
 poverty in rural America (statement),
 7296
 rural America, effect of Federal programs,
 hearings, 17583

Country team, illustrated profile of our
 American missions abroad, 8711

Counts, Charles, encouraging American
 handicrafts, what role in economic develop-
 ment?, 2160

Couplings:
 fluid coupling assembly, quick attach and
 release, self-aligning, self-sealing, 6789
 propellant-feed-system, effect on analysis
 of chugging, 11491
 rotational fluid, eliminates hose entangle-
 ments, 6754
 yaw, turning maneuvers of large transport
 aircraft, simulator and flight study,
 11494

Courier station design, 13301

Couriers, *see* Diplomatic couriers.

Courses of study, *see* Curriculum.

Court of Claims:
 cases, calendar, 3162
 cases decided—
 June 1965, including index to v. 160—
 171, 970
 July 1–Sept. 30, 1965, 2142
 Oct. 1–Dec. 31, 1965, 4663
 Jan. 1–Mar. 31, 1966, 4664
 Apr. 1–May 31, 1966, 7840
 June 1–Sept. 30, 1966, 12436
 Oct. 1–Dec. 31, 1966, 16453
 Jan. 1–Feb. 28, 1967, 17686
 judgments rendered, 4573
see also names of claimants.

Court of Customs and Patent Appeals:
 appeals in patent and trademark cases,
 amend U.S. Code, report, 877
 cases adjudged, weekly report, 3977
 customs bulletin, weekly, 3174
 customs cases adjudged, 10881
 patent cases adjudged, 12437

Court of General Sessions, D.C.:
 authority to waive certain provisions rel.
 to marriage license issuance—
 law, 13533
 reports, 12384, 13641
 criminal justice in metropolitan court,
 processing of serious criminal cases, 1348
 liens established by judgment or decree,
 recordation by recorder of deeds—
 law, 1971
 reports, 2026, 2102

Court of Military Appeals:
 court martial reports, holdings and de-
 cisions, 4671
 digest, annotated and digested opinions,
 9369
 report, 7844

Courtesy (military), *see* Military ceremonies,
 honors, and salutes.

Courtesy (naval), *see* Naval ceremonies, hon-
 ors, and salutes.

Courtesy examiners handbook, 5947

Courts, task force report, President's Com-
 mission on Law Enforcement and Adminis-
 tration of Justice, 10032
see also State courts—Venue—*also* names
 of courts.

Courts martial and courts of inquiry:
 instructions guide, Air Force manual,
 10220
 Judge Advocates General boards of review
 and Court of Military Appeals reports,
 holding and decisions, 4671
 manual, 1951, addendum, changes, 973,
 9361

Courts of Appeals, *see* Circuit Courts of Ap-
 peals.

Courts of United States:
 appropriation, 1967, law, 501
 appropriations, 1968—
 hearings, 10632, 16390
 reports, 10616, 16372
 crisis in Federal courts, administration of
 justice, hearings, 16422
 Federal judges, judicial fitness, removal,
 retirement, and disciplining procedures,
 hearing, 7819
 Federal judicial system, investigation—
 authorization and expenses, reports,
 6070, 15008
 report, 9287
 jurisdiction and work, 10662
 narcotic addicts, dealing more effectively
 with individuals—
 hearings, 2123
 law, 497
 report, 2013
see also District Courts.

Cows:
 milk cow numbers, 15806
 milk cows on farms, production per cow,
 etc., 5683
 milk, forage fed 1966–67 winter season,
 11880
 milking, time and travel required, effect of
 layout, equipment, and routine, 4151
 milk production, 7199
 roughage fed, 1966 summer season, 2940
see also Dairy herd improvement associa-
 tions.

Cox, E. R., geology and hydrology between
 Lake McMillan and Carlsbad Springs, Eddy
 County, N. Mex., 8178

Cox, J. E., preparation of CrFe alloys, 5364

Coyne, Walter A.:
 presidential scholars, 4717
 presidential scholars, what shapes their
 talent?, 12468

Coyner, Mary S., agriculture and trade of
 Panama, 7887

CPSR, *see* Government contracts.

Crab meat, radiation-pasteurization pro-
 cesses, 13348

Crabs, *see* King crabs—Portunids.

Crack propagation theories, 17939

Cracking of metals, *see* Fracture of metals.

Cracks in glass electrical connector headers
 removed by dry blasting with fine abrasive,
 12886

Craft, Charles E., effects of ionizing radi-
 ation on concentration of amino compounds
 in rat plasma, 5714

Craft (nautical):
 pleasure craft, safety suggestions, etc., 220
 small, Federal item identification guides
 for supply cataloging, supplements, 3293

Crafts, Edward C., remarks, Jan. 28, 1967,
 4914

Crafts, *see* Arts and crafts.

Crafts, protective and custodial employees,
see Government officials and employees.

Crambe, culture, new industrial oilseed crop,
 4140

Crambidae, *see* Moths.

Cramer, Stephen D., electrodeposition of
 thick coatings of platinum and palladium
 on refractory metals, 16861

Cranberries, production, use, value, 1965–66,
 by States, 14696

Crandell, Dwight R., volcanic hazards at
 Mount Rainier, Wash., 9562

Crane, Theodore, farm index, 3262

Crane (birds):
 hunting, possession, etc., Federal regula-
 tions, 1080, 16623
 in Alaska, 14061
 whooping cranes of Aransas National Wild-
 life Refuge, general information, 8043

Cranes, derricks, etc.:

bridge crane, telescoping hoist, square tubing reduces cost, 17920
self-actuating grapple automatically engages and releases loads from overhead cranes, 5150

swing-out rail system separates overhead crane rails, 6704

Cranium, *see* Skull.

Crashes, *see* Aircraft accidents.

Craters:

apparent crater studies—

Project Palanquin, 4237

Project Pre-Schooner, final report, 13342

cratering in low-density targets, 11420

Creede caldera, San Juan Mountains, Colo., 8166

geologic and engineering properties, Project Pre-Schooner, final report, 17394

hypervelocity impact, in aluminum, projectile size effects, 14468

measurements, 4236

micrometeorite, in metal substrates, observation utilizing electron micrographic replica methods, 9815

nuclear engineering properties, Plowshare program, 17398

Craters of the Moon National Monument, general information, 9957

Craven, Harold L., transportation proceedings, 7407

Crayfish:

crayfishes and their epizootic ostracod and branchiobdellid associates of Mountain Lake, Va., region, 15604

new crayfish from Alabama caves, etc., 17050

see also Cambarus.

Crawford, H. S., establishing grass range in southwest Missouri Ozarks, 14092

Crayfish, *see* Crawfish.

Cream, fluid milk and cream report, 3339

Creasey, S. C., general geology of Mammoth quadrangle, Pinal County, Ariz., 11163

Creatine, urinalysis, automated technique determines concentration by colorimetry, 14437

Creatinine:

urinalysis, automated technique determines concentration by colorimetry, 14437

urinary excretion as index of fat-free mass composition in rats, 7415

Creative federalism:

article, 2377

hearings, 4639, 13864

Creative quest in science, 16763

Creativity, elementary and secondary education act, PACE, projects to advance creativity in education, supplementary services and centers, etc., 2189, 7915, 10940-941, 17723

Credit:

and monetary developments, 16594

businessmen, moderation today means progress tomorrow (address), 144

consumer credit and bankruptcy, garnishments (remarks), 16796

consumer credit protection act, hearings, 17594

department store, monthly report, 3200

Federal programs, report, 6090

Federal reserve banks, amend law as to security acceptable—

hearing, 7800

report, 9282

Federal reserve policy and credit markets (remarks), 1061

flows, interest rates versus interest ceilings in allocation (remarks), 4786

foreign, information sources, 15340

housing, code of Federal regulations, 11037

mortgage, to meet housing needs, Federal policies, hearings, 15151

Credit—Continued

mortgages, study, housing, real estate, etc., statements and recommendations by

Federal agencies, 10821

sales finance companies, monthly report, 3846

truth in lending act—

hearings, 10822

report, 13812

see also Banks and banking—Installment credit—Production credit associations.

Credit insurance, health, accident, and life, for student loans, increase maximum amount allowable for student loans in D.C., report, 882

Credit unions:

how it helps us, hi, I'm Mr. Money Wise, 14649

project moneywise, role in war on poverty, 9451

serve community (remarks), 11701

State-chartered, 2243

State-chartered, purchase of shares by Federal employees through payroll allotment, hearing 13845

see also Federal credit unions.

Creditors:

committee functions and expenses under bankruptcy act, amend—

hearing, 16420

report, 9093

Creek and the city, urban pressures on natural stream, Rock Creek and metropolitan Washington, 4913

Creek Indians:

Nation of Oklahoma—

estates of intestate members, etc., disposition—

law, 16132

reports, 10578, 15114

judgment funds, disposition—

law, 16132

reports, 10578, 15114

Creep of materials, adhesives, uniaxial creep, measurement in free film form, 12570

Creep of metals:

niobium creep-rupture properties, nitrogen effect, 10000

tantalum alloys resist creep deformation at elevated temperatures, 6748

tungsten-fiber-reinforced copper composites, 17002

Creep of snow and ice, research report, 7380

Cremation, public crematorium in District of Columbia, establishment, amend act, report, 16379

Crespo, Luis, relief, 357, 585, 810

Cressey, Roger F.:

calligold copepods parasitic on sharks of Indian Ocean, 6958

Carlus, new genus of calligold copepod, with key to genera of Calliginae, 15607

genus Gliopotes and new species with notes on host specificity, etc., 11607

revision of family Pandaridae (Copepoda: Calligoida), 5314

Cretaceous period:

ammonites from Matanuska Formation, 8170

late, Enos Creek detachment thrust fault, geology, 2360

rocks, east-central San Juan Basin, N. Mex., stratigraphic and regional tectonic implications, 16693

rocks in Corozal quadrangle, Puerto Rico, 1112

stratigraphy in west-central Puerto Rico, 17820

upper, gastropods from Pierre shale at Red Bird, Wyo., 8161

Crew leaders, social security information, 15741

Crews, *see* Spaceship crews—Submarine crews.

INDEX 1967

Crime and criminals:

- challenge of crime in free society, report by President's Commission on Law Enforcement and Administration of Justice, 7044
- combating crime in U.S., national debate topic for high schools, 1967-68, selected excerpts, etc., 10698
- controlling crime through more effective law enforcement, hearings, 15166
- crime and delinquency abstracts (periodical), 3163
- crime and its impact, assessment, President's Commission on Law Enforcement and Administration of Justice, 13065
- crime and lawlessness within United States, investigation—
 - authorization, report, 15083
 - interim report on riots, etc., 16375
- crime control conference proceedings, 16788
- crime prevention and you, 11219
- criminal justice in metropolitan court, processing of cases, 1348
- detection and investigation of attempted criminal violations of tax laws, 16721
- District of Columbia crime and criminal procedure bill—
 - hearings, 10644
 - report, 13646
- District of Columbia, victimization and attitudes toward law enforcement, 13058
- District of Columbia, war on crime with more restrictive and rehabilitative legislation, message from the President, 7596
- Federal crime insurance, contributions to science and technology, 16437
- Federal effort against organized crime, hearings, 13706
- Federal interrogation act of 1967, hearings, 12306
- Federal offenders in U.S. district courts, 8799
- impact of crime on small business—
 - hearings, 12428
 - report, 16365
- SBA to conduct study—
 - law, 17549
 - reports, 14961, 14982, 16261
- Indians, crime committed in Indian country, amend U.S. Code, law, 421
- juvenile delinquency and youth crime, task force report, President's Commission on Law Enforcement and Administration of Justice, 11703
- laws, compilation, 1982
- major metropolitan areas, crime and law enforcement studies, 13060
- organized crime, annotations and consultants' papers, task force report, President's Commission on Law Enforcement and Administration of Justice, 10033
- persons under supervision of Federal probation system, 15821
- prevention of crime, recommendations for measures to be taken, message from the President, 5998
- publications, list, 2802
- reentry of offender into community, 8791
- return of fugitive bailees, hearing, 6117
- safe streets and crime control act of 1967, hearings, 12306
- science & criminal justice symposium, 11699
- science and technology and criminal justice, task force report, 11704
- solving crime by geometry, USSR study, 1238
- uniform crime reports, 14015
- uniform reporting, quarterly release, 3992
- victimization in U.S., field surveys, 13059
- see also Conspiracies—Criminal law.

Crime Control, National Conference, see National Conference on Crime Control.

Crime in District of Columbia, President's Commission on, see President's Commission on Crime in District of Columbia.

- Crime Protection Insurance Corporation, Small Business, see Small Business Crime Protection Insurance Corporation.
- Criminal investigators, Food and Drug Administration, career opportunities, 11095
- Criminal jurisdiction:
 - status of forces—
 - agreement with Republic of Korea, 8726
 - agreements, compilation, 7743
- Criminal law:
 - criminal justice in metropolitan court, 1348
 - District of Columbia laws, amend, hearings, 10644
 - investigation and study, authorization, report, 4602
 - law enforcement and criminal justice assistance act of 1967, reports, 13670, 13685
 - obstruction of criminal investigations, prohibit, amend U.S. Code—
 - hearings, 12306
 - reports, 12376, 16259, 16280
 - refusal to testify, compelling of testimony and granting immunity in certain crimes, amend U.S. Code—
 - hearings, 12306
 - report, 12377
 - science & criminal justice symposium, 11699
 - science and technology and criminal justice, task force report, 11704
 - study, report of subcommittee work, 9284
- Criminal Laws, National Commission on Reform of, see National Commission of Reform of Federal Criminal Laws.
- Criminal procedure:
 - appeal by U.S. from decisions sustaining motions for return of seized property or to suppress evidence, amend U.S. Code and D.C. Code, report, 14990
 - appellate review of sentences, provide, report, 12394
 - District of Columbia crime and criminal procedure bill—
 - hearings, 10644
 - report, 13646
 - Federal interrogation act of 1967, hearings, 12306
 - investigation and study—
 - authorization, report, 4602
 - report of subcommittee work, 9284
 - see also Habeas corpus—Searches and seizures.
- Crimson clover, growing, 5639
- Crinoids, monograph, 14528
- Cripple Creek, distribution of gold, tellurium, silver, and mercury in mining district, 9571
- Cripples, crippled children's program, 1964 statistical highlights, 12094
- Crisp, Robert C., relief, 830, 10705, 16125, 16169
- Criteria for evaluation in planning State and local programs, 16411
- Critical materials, see Strategic materials.
- Critical phenomena, 1521
- Critical point, single-point failures in critical system designs, program computes, 11437
- Critiques, Astmoy article on life in 1990 in *Literaturnaya gazeta*, 12729
- Crittenden, A. L., Carlson-Crittenden device for collection of human parotid fluid, further modification, 10240
- Crittenden, Max D., Jr., mineral resources of High Uintas primitive area, Utah, 12598
- Crivella, Bart J., salad dressing, mayonnaise and related products, 145-146
- Crocco, L., mixing parameter analytical method used for laminar separations, investigation, 9806

Crockett, Davy, 5-cent commemorative postage stamp (poster), 14606
 Croft, M. W., thorium fuels for heavy water organic cooled reactor, 5764
 Crom, Richard J., simulated interregional models of livestock-meat economy, 12453
 Crook, William H., nomination, hearing, 10864
 Crooked Creek:
 and tributaries at and in vicinity of Harrison, Ark., engineer report—
 departmental edition, 10955
 document edition, 10700
 Crooks, Donald M., poison ivy, poison oak and poison sumac, identification, precautions, eradication, 10164
 Croom, Delwin R., low-subsonic wind-tunnel and free-flight drop-test investigation of paraglider configuration having large tapered leading edges and keel, 1475
 Crop insurance, *see* Agricultural insurance—Hail insurance.
 Crop lands, *see* Land.
 Crops:
 census of agriculture, 1964, 5903-4, 7499-7510, 8962-65, 10388-398, 12091-92, 13404-412, 14837-839, 16036-40, 17442
 certifying your program acres, ACSC administration, 7293
 crop production (periodical), 3164
 Federal reclamation projects, 1966, report, 17179
 statistical appendix, 17180
 field—
 acreage, yield, production, price, value, by States, 1959-64 revised estimates, 4148
 seeds, supply and disappearance, 1960-64 U.S. average, 1964-66 annual acreage, etc., 8755
 zinc deficiency in wheat, 5640
 field and seed, production, farm use, etc., by States, 10205, 11877
 foreign crops and markets (periodical), 3344
 insecticides, guide, 10162
 new, publications list, Northern Utilization Research and Development Division, 13199
 new varieties, 2244
 pesticide residues, cleanup and confirmation of identity, 13200
 planting, prospective, 8753
 seed crops—
 acreage, yield, production, etc., 4149, 8758
 forecast, 3859
 prices, 3860
 stocks report, 3861
 values, season average prices, value of production, 8754
 weather and crop bulletin (periodical), 4060
 see also names of crops.
 Crosby, John K., feasibility study of explosive gun, 8410
 Crosby, Robert L., intermediate phases in magnesium-cerium system between magnesium and Mg₂Co, 1414
 Cross, Alexander D., relief, 10534, 13521, 13759
 Cross Creeks National Wildlife Refuge, birds, list, 8029
 Cross-Florida Barge Canal, Silver Springs lock, rename R. N. Bert Dosh Lock, report, 885
 Cross modulation in Scamp signal processor, 9990
 Cross reference index to manual of Navy officer classifications, 7014
 Cross section:
 differential cross sections for (d,a) reaction on scandium 45, 16989
 electron impact excitation, molecular hydrogen, estimation, 11546
 electron scattering and bremsstrahlung cross-section measurements, 9811

Cross section—Continued
 Gryzinski and Born, comparison for metastable 2 state of atomic hydrogen, 9874
 low energy electron collision data, bibliography, 8521
 Cross Village, Mich.:
 harbor, engineer report—
 departmental edition, 1023
 document edition, 523
 Crossett, Ark., periodic cubic growth in natural loblolly stands, 2324
 Crossett Experimental Forest, farm forestry forties, 1966 harvest, 8098
 Crotalaria, seed morphology, anatomy, and identification, 17334
 Crouse, James E., blade-element performance of 2-stage axial-flow pump with tandem-row inlet stage, 11513
 Crow Village, Alaska:
 ethnoarcheology—
 departmental edition, 8872
 document edition, 9048
 Crowder, Dwight F., mineral resources of Devil Canyon-Bear Canyon primitive area, Calif., 8155
 Croxton, Ralph J., detection and classification of ash dieback on large-scale color aerial photographs, 8116
 CREEL, *see* Cold Regions Research and Engineering Laboratory.
 CRREL, reports, 14791
 CRS, *see* Community Relations Service.
 CRT, *see* Cathode ray tubes.
 Crucibles, cast from beryllium oxide and refractory cement, impervious to flux and metal, 5152
 Crude oil, *see* Petroleum.
 Cruelty to children, *see* Children.
 Cruik, R. W., estimating potential evapotranspiration from climatological data, etc., 17831
 Cruises:
 operators, require to file evidence of financial security, etc.—
 hearings, 744
 law, 481
 safe ocean passenger travel in U.S. (remarks), 6258
 Crumlish, Joseph D., state-of-the-art of benefit-cost analysis as related to transportation system, 1525
 Crustaceans:
 crayfishes and their epizoitic ostracod and branchiobdellid associates of Mountain Lake, Va., region, 15604
 decapod crustaceans from St. Helena Island, South Atlantic, 6945
 entocytherid ostracods, new genus, etc., 5305
 Gonodactylus Bethold, demanil section, new species, 14541
 Hemicytheridae and Trachyleberididae (Ostracoda) off northeastern North America, classification and distribution, 8174
 Hemisquilla ensigera, comparison of Australian and American specimens, 6955
 Manningia, notes on genus and description of new species, 6988
 myodocopid ostracod—
 Euphiomedes arostrata, from Maldive Islands, 6954
 families Philomedidae and Pseudophilomedidae, 6963
 from Great Bahama Bank, 8543
 from Red Sea, 5315
 Sarsilella species, 6971
 ostracods, new genus and 3 new species, with key to genus Dactylocythere, 6966
 parasitic copepod Sphaeronellopsis monothrix and its myodocopid ostracod host Parasterope pollex, 15605
 review of genus Odontodactylus, etc., 14535
 see also Amphipods—Copepods.

INDEX 1967

Cruz, Oscar Valdes, *see* Valdes-Cruz, Oscar.
 Cruz-Munoz, Federico de la, relief, 13516, 13611, 13764
 Cruzin, tumorotropism of trypanosoma cruzi as basis for biotherapy of cancer, USSR study, 6548
 Cry, George W., tropical cyclone rainfall effects on distribution of precipitation over Eastern and Southern U.S., 15230
 Cryogenics:
 cooking reduces high voltage arcing between electrodes operating in vacuum, 5146
 crack growth on flat and curved surfaces at cryogenic temperatures, continuity gage measurement, 2721
 electromechanical instrument continuously measures density of flowing fluids, 9844
 fatigue data developed for Inconel 718, 8472
 fluid, pressure effect of sound wave, 12940
 fluid, quick attach and release coupling assembly, self-aligning, self-sealing, 6789
 fluid sampling device permits testing under hazardous conditions, 6814
 gases, temperatures, fast response thermocouple measurement, study, 6820
 hydrogen flowing turbulently in straight and curved tubes at high heat fluxes, heat transfer, 6713
 infrared reflectances of metals at cryogenic temperatures, 6922
 insulation, inexpensive replacement for vacuum jacketed line, 16877
 jacketed piping, stress-relieved, 15553
 liquid experiments in orbit, 5164
 liquid level controllers, automatic, safe for use near combustible substances, 1466
 liquid, reclamation system, 18007
 liquids, experiments in orbit settling and interface dynamics, 2608
 nickel alloys for use at cryogenic temperatures, excellent spring properties developed, 17930
 refrigeration system—
 improved, 12885
 Joule-Thomson process, errata, 12989
 seal remains leaktight during thermal displacement, 12837
 single-engine Claude cycle as 4.2°K refrigerator, 14517
 stainless steel for cryogenic service, stabilizing components, 17987
 techniques for stripping Teflon insulated wire, 8471
 temperature, vacuum applications, feed-thru flange useful, 6778
 temperatures, crack growth measured on flat and curved surfaces, 17992
 weldable high strength aluminum alloy for cryogenic service, 6776
 Cryostats, liquid helium level, maintaining with simple pump, 8465
 Crystal chemistry, *see* Chemistry.
 Crystal lattices, finite lattice heat capacity effects on spin-lattice relaxation, 14516
 Crystal Mountain mining district, composition of pegmatites, 1111
 Crystallization, amorphous boron powder recovery and purification of boron from residues and scrap, 12017
 Crystallography:
 crystallization of natural rubber (lecture), 9935
 dislocation structures in slightly strained tungsten and alloys, 14486
 neutron diffractometer allows both magnetic and crystallographic analyses, 12835
 x-ray structural analysis of globular proteins, USSR study, 12726

Crystals:
 crystal microbalance measures condensable molecular fluxes, 6744
 ice—
 growth rates, studies, 6447
 hexagonal and cubic, at low temperatures, study, 17375
 nucleation and growth, 6442
 quartz, detect gas contaminants during vacuum chamber evacuation, 14416
 rhenium, single-crystal and polycrystalline, friction characteristics in vacuum, 9912
 semiconductor, thin film process forms effective contacts on, 11471
 silicon carbide, process facilitates photoresist mask alignment, 11473
 silicon, high-purity single-crystal, proton bombardment, 11534
 zinc sulfide, cobalt-doped, bleaching effect under influence of ruby laser pulses, 9926
 see also Liquid crystals.
 Ctenostomata, *see* Victorella.
 Cuba:
 political prisoners and their relatives, hearings, 957
 refugees movement to United States, agreement, 2903
 translations, 3953
 Cubans:
 correspondents report on North Vietnam, 15410
 refugees—
 assistance, appropriations, 1967, law, 405
 assistance, appropriations, 1968, hearings, 15014
 status, adjustment—
 law, 445
 reports, 662, 706, 909
 Cubas, Fidel Rodriguez, *see* Rodriguez-Cubas, Fidel.
 Cubbison, Robert W., effect of canards in reducing launch vehicle flight loads, 14496
 Cucchiara, Orlando, development of krypton-85 as universal tracer, 13535
 Cucumbers, pickleworm control, 4116
 Cucurbits, pickleworm control, 4116
 Cuing techniques, training tasks, phase 3, 15635
 Cuix, *see* Mosquitoes.
 Culicidae, *see* Mosquitoes.
 Cullen, Joseph P., battles of Fredricksburg, etc., where hundred thousand fell, 1533
 Cullen, William C., thermal-shock resistance for built-up membranes, 15584
 Culligan, Glendy, high school and cultural illiterate, 7899
 Cullom, Richard R., solidification in thermal-energy storage systems with axisymmetric heat-transfer solutions, 5246
 Culture:
 changing patterns of work and leisure, 5042
 Chinese cultural revolution as seen by Alberto Moravia, 16736
 cultural relations, agreement with—
 Morocco, 10102
 Rumania, 11869
 Union of Soviet Socialist Republics, 7182
 early cultures in south coastal Guatemala, 9954
 educational and cultural diplomacy, 7150
 exchange, international, 4080-81
 future international meetings, world list, 4074
 high school and cultural illiterate, 7899
 influences on children, research programs, studies in progress, 8967
 international exchange of persons program, 14678
 international information and cultural series, 7150, 14678, 17226

Culture—Continued

- Mandan culture history, interpretation—
departmental edition, 11973
document edition, 12193
Mao's cultural revolution, review by
USSR's Literary gazette, 12760
materials, importation agreement—
implement—
hearing, 951
law, 371
reports, 653, 655, 903
text, 5549
presentations, USA, report, 17226
visual and auditory materials of cultural
character, circulation, agreement and
protocol, 5546
youth, its values and beliefs, 7232
Culvert pipe, *see* Pipe and pipe fittings.
Culverts, corrugated metal pipe, structural
design, criteria and recommended installa-
tion practices, 2843
Cumberland Plateau, Upper Cumberland
Coal Reserve District, land disturbances
from strip-mining, 8077
Cummings, William H., forestry research
progress, 1966, McIntire-Stennis coopera-
tive forestry research program, 13902
Cummins, Joseph M., feasibility of mass,
outdoor cultivation of *Gonyaulax catenella*, 15684
Cunningham, Herbert J., flutter analysis of
flat rectangular panels, 6910
Cunningham, T. J., Jr., Army digest, 3042
Cunnington, George R., Jr., performance of
multilayer insulation systems for tempera-
tures to 700°K, 17943
Cupola-furnaces, how to inspect chart, 9689
Cupps, Cecil Q., reservoir oil characteristics,
Cut Bank field, Mont., 8376
Cure for Chagas disease discovered, Brazil,
11243
Curecanti storage unit, 11770
Curie, Marie S., centenary, symposium cele-
bration (remarks), 17404
Curran, E. M., Air Force Medical Service
Digest, 3994
Curran, Arthur N., heat-transfer study of
regeneratively cooled hydrogen-fluorine
rocket engine, 17006
Currencies, *see* Money.
Currency, *see* Money.
Current application of cybernetics in USSR,
12730
Current discharge at selected stations in
Pacific Northwest, 3907
Current economic analysis, CEA-series, 3341,
3874
Current export bulletin, 3167
Current Federal workforce data, 1919, 10421
Current fishery statistics, C.F.S. series,
1074-75, 3024, 3073, 3335-36, 3338, 3363,
3378, 3530, 3533, 3545, 3546, 3553, 3564,
3621, 3628, 3638, 3836, 3876, 3884, 3940,
4058, 8013-18, 9502-13, 11072-74, 12549-
544, 14054, 16610-618, 17769-771
Current housing reports, 3168
Current industrial reports, 3169-70, 3540,
4322-47, 5853-76, 7478-82, 8938-48,
10352-359, 12067-83, 13386-397, 14825-
830, 15990-16007, 17429-437
announcements and order form, 4325,
8948
Current meters:
isotopic water current meters, DWICA's,
13328
performance, laboratory determination,
4729
Price current meters, description, etc., 9951
Current population reports, 3171
Current retail trade reports, 3172, 17439
Current selected services report, 7490
Currents, *see* Air—Electric currents—Lake
currents—Ocean currents.
Curriculum:
adult basic education, beginning local
guide, 4708

Curriculum—Continued

- beginning Russian 2, USAFI study guide,
974
closed circuit TV maintenance course, class
C, 7015
Coast Guard Academy, catalogue of
courses, 14879
course and curriculum improvement proj-
ects, mathematics, science, engineering,
5324
high school and cultural illiteracy, 7899
labor courses, Civil Defense Office refer-
ences, 14845
management course presentations, 13115
National Center for Air Pollution Control,
July 1967-June 1968, bulletin of courses,
18153
National Center for Radiological Health
training and manpower development
program, 13085
research abroad, overseas projects in edu-
cation, 1014
university, in marine sciences, 17752
vocational and technical education pro-
grams determining courses of study, 1017
Curry, Rembert L., testing aggregate, 6215
Curtis, Ernest A., relative pressure changes
in coal pillars during extraction, 12829
Curtis, H. Allen, generalized decomposition
theory of finite sequential machines, 18008
Curtis, Lindsay K., alcohol, fun or folly?,
18104
Curtis, Robert O.:
comparison of site curves for Douglas-fir,
2309
formula for Douglas-fir total cubic-foot
volume table, 1092
Curtiss, H. C., Jr., Princeton dynamic model
track, 7409
Curvature (mathematics):
pressure distribution curves applicable to
pneumatic tires, experimental study,
11401
Cushman, Bernard, remarks, Oct. 10, 1967,
18088
Cusick, Leo J., remarks, Apr. 17, 1967, 9583
Cusimano, John P., paper, Aug. 26-27, 1967,
17392
Custer County, S. Dak., Hot Springs quad-
rangle, geology, 12597
Customs, *see* Tariff.
Customs Bureau:
appropriations, 1968, decrease, proposal,
10695
duty free sales of certain waste produced
from imported conditionally duty-free
carpet wool, GAO review, 12591
Customs Court:
cases adjudged—
Customs Court reports, 972, 9359, 16454
in Treasury decisions, weekly report,
3977
customs bulletin, weekly, 3174
Customs districts:
by continent, airborne foreign trade, sum-
mary reports, 3995
code classification used in compiling U.S.
foreign trade statistics, schedule D,
4359, 8936
exports of merchandise, summary reports,
4005
imports of merchandise, summary reports,
4006
Cut Bank field, Mont., reservoir oil character-
istics, 8376
Cuthbert, F. P., Jr., insects affecting sweet-
potatoes, 15837
Cutter, Doris, workshop for Baptists on deaf-
ness and rehabilitation, 2968
Cutting of metals, *see* Metal cutting.
Cutting tools:
metal, current industrial reports, 12075
metal, industry, 1961-66, shipments, 15984
Cuttings, *see* Reproduction.
Cuyahoga County, Ohio, children in need,
federally assisted aid program to families,
study, 4386

INDEX 1967

CW, *see* Radio communication.
 Cyanogan, CN violet radiation behind shock waves in air contaminated with carbon-bearing compounds, analysis models, 9905
 Cybernetics:
 and control theory, USSR studies, 5021, 15367
 application in system of control sciences, USSR study, 19660
 Communist Chinese abstracts, 3117
 cybernation and social change, seminar, 6596
 East European abstracts, 3219
 economic, for solving problems, Rumanian studies, 1309
 economy and industry, USSR study, 6537
 in service of Communism, information theory, computer technology, and semiotics, 12742
 machine thinking, USSR study, 2456
 mathematical problems, and computer engineering, USSR study, 16784
 medical, introduction, 14503
 military science, scientific and philosophical application, USSR study, 1197
 problems, USSR study, 1318
 psychology of sets and cybernetics, 8264
 pursuit urged, USSR study, 1225
 recent developments in USSR, 8259
 research at AtlantNIRO, 1202
 role of Bulgarian scientists, 1159
 strategic importance, USSR study, 17875
 technical, problems of control of Soviet science, 2427
 testing student's knowledge, 8864
 USSR—
 abstracts, 4027
 current applications, 12730
 discussion by academician A. L. Berg, 4975
 organization of interdisciplinary studies, 15349
 publications on applied problems in technical cybernetics described, 14262
 research, 6499
 self-organizing control systems, 9617
 translations, 14272
 utilization in clinical oncology, USSR study, 6553
 Cybernetics (USSR periodical):
 translations, 3176
 Cycling, thermal and bias cycling stabilizes planar silicon devices, 12902
 Cyclohexane, 1,4 cyclohexanediol (methylamine), regenerative carbon dioxide absorbent, 8589
 Cyclones, tropical rainfall, effects on distribution of precipitation over eastern and southern United States, 15230
 Cyclopoidae, *see* Copepods.
 Cyclotrons, ion wave generation in uniform and nonuniform plasma and electron inertia effects, 12962
 Cylinder pressmen, *see* Pressmen.
 Cylinders:
 aerodynamic characteristics for cone-cylinders-frustum-cylinder configurations, 9804
 axially compressed eccentrically stiffened, plastic buckling, 5249
 corrugated, large diameter, with eccentric ring stiffeners, bending tests, 1506
 flat-front family, effects of Reynolds number and flow incidence on flow characteristics, 9903
 hemisphere, effect of roughness on heat transfer at Mach number 10.4 and 11.4, 8492
 hollow elastic, bonded to thin casing of different material, vibrations, 18048
 hollow, transient radiation and conduction, 17941
 large-diameter ring-stiffened, subjected to hydrostatic pressure, test, 1479

Cylinders—Continued
 metal, mechanism facilitates coating inner surfaces, 8478
 nonconcentric rotating, superlaminar flow between, 12852
 open-ended circular cylindrical microwave cavities, errata, 11485
 positive displacement, measures corrosive liquid volume, 6756
 radiation through plasma sheath, 5176
 ring-stiffened corrugated, structural efficiency in axial compression, 14470
 sandwich, thermoelastic and viscoelastic cylindrical sandwich shells, equations, 1436
 single-source mechanical loading system produces biaxial stresses, 17990
 thin-walled—
 circular, nonlinear flexural vibrations, 14482
 radial displacements, 17947
 thermal bending plus twist, of open section, with application to gravity gradient booms, 15561
 Cylindroleberidae, *see* Crustaceans.
 Cynthia, Ky., meteorite, composition, 18089
 Cyphocaris challenger, *see* Amphipods.
 Cyprus:
 background notes, 11816
 capsule facts for Armed Forces, 15912
 mineral industry, minerals yearbook chapter, 6648
 Cystic fibrosis, *see* Fibrosis.
 Cystic lymphadenopathy, *see* Lymphadenopathy.
 Cytochemistry:
 neuron differentiation in different parts of rabbit brain, USSR study, 14221
 ultrastructures, USSR, 12697
 Cytogenesis, somatic, problems, USSR study, 12684
 Cytology:
 diagnosis, differential, of precancer and cancer of cervix uteri using fluorescence and phase-contrast microscopy, USSR study, 12700
 exfoliative, using for early detection of oral cancer, training course summary, 18161
 morphology of brain tumor cells using anoptical microscope, USSR study, 12739
 photodiffusion in nerve and muscle cells under effect of local and irradiating excitation, USSR study, 14259
 study of effects of deuterium, environment, 16881
 Cytospectrophotometric research on DNA content in tumor cells of human brain, 12757
 Czechoslovakia:
 capsule facts for Armed Forces, 15918
 computer technology, state, 15409
 drugs, psychopharmacologic and psychotomimetic, research, 16774
 entomological research, main centers and principal achievements, 2472
 gnatobiology, 16761
 mineral industry, minerals yearbook chapter, 2551
 Ministry of Health directives on control of pharmaceuticals, 12685
 scientific research and development base in Slovakia, 17876
 study mission report, 7809
 subject index of legal regulations published during 1966 in Sbirka Zakonu CSSR, 15423
 U.S.S.R. boundary, study, 17225

D

D.C. Transit System, Inc., franchise act, amend rel. to mass transit subsidy, hearing, 12293
 D.H.I.A., *see* Dairy herd improvement associations.
 D.S.A., *see* Defense Supply Agency.
 Daane, J. Dewey:
 remarks—
 Oct. 24, 1966, 1067
 Jan. 31, 1967, 4784
 Sept. 11, 1967, 16598
 Dactylocythere, *see* Crustaceans.
 Dahms, Walter G., low stand density speeds lodgepole pine tree growth, 11117
 Dahomey:
 labor conditions, 1372
 Peace Corps volunteers, agreement, 17237
 Daily food guide, 7837, 9333
 Daines, Jay V., fabrication techniques for fiber glass reinforced primary aircraft structures, 4222
 Dairy cattle, *see* Cattle.
 Dairy farms, *see* Dairying.
 Dairy herd improvement associations:
 DHIA cow performance index list, registered progeny of DHIA sires, 8807
 national cooperative program, 3188
 dairy herd improvement records, 4104
 sire summary list, 7245, 17299
 Dairy industry, *see* Dairying.
 Dairy plants, *see* Dairying.
 Dairy products:
 annual statistical summary, 7200
 farm-retail price spreads, 10181
 how to use USDA grades in buying, 5671
 import act of 1967, hearings, 10801
 manufactured products, 1966 production, 14699
 marketing, 4697
 purchases and utilizations of dairy products under price support program, 1965-66 marketing year, 21
 see also names of products.
 Dairying:
 commercial dairy farms, northeast and midwest, costs and returns, 16488
 dairy-herd-improvement letter, national cooperative improvement program, 3188
 dairy herd improvement through national cooperative improvement program, 4104
 dairy manufacturing firms in Minnesota, utilization of plant capacity, 12454
 dairy market statistics, 1966, annual summary, 7298
 dairy marketing economics, research publications, bibliography, 13950
 dairy plants surveyed and approved for USDA grading service, list, 6131, 13887
 dairy situation (periodical), 3189
 foreign agriculture circulars, 3345
 indemnity payments to dairy farmers, extended—
 law, 16140
 reports, 14981, 15088
 1966 pasture season, 1643
 publications, price list, 2800
 Dakan, Norman E., intelligence, supp. 1, PACAF basic bibliographies, 7338
 Dale, John M., preparation of low density sulfur foam, 17379
 Dale, R. H., ground-water geology and hydrology of Kern River alluvial-fan area, Calif., 1116
 Dales, Sophie R., benefits and beneficiaries under public employee retirement systems, 11798
 Dallas, Tex., area wage survey, 6611
 The Dalles, Oreg., artificial recharge through well tapping basalt aquifers, 16700
 The Dalles Dam, fish passage report, 13974
 Dalrymple, Dana G., controlled atmosphere storage of fruit, 7959

Dalrymple, Glenn V.:
 biological effects of space proton environment, 4176
 protons and space travel, 1731
 Dalrymple, Tate, measurement of peak discharge by slope-area method, 11185
 Dalton, Leonard J., relief, 285, 842
 Dalton, Patricia, source arrangement for low-exposure-rate total-body irradiation facility for man, 13338
 Daly, Angela R.:
 census of manufacturers, 1963—
 area statistics, 7462
 expenditures for new plant and new equipment, 7455
 summary and subject statistics, 7460
 value of manufacturers' inventories, 7454
 census of mineral industries, 1963—
 employment and related activities, 7469
 fuels, electric energy, and selected supplies used, 7470
 general summary, 7466
 power equipment in mineral industries, 7471
 size of establishments, 7467
 type of organization, 7468
 water use in mineral industries, 5848
 Damadian, Raymond, abnormal phosphorus metabolism in potassium transport mutant of *Escherichia coli*, 10235
 Damazo, Elpidio D., and wife, relief, 14931
 Damm the torpedoes, 17908
 Dampers:
 fluid state hydraulic damper, 10286
 local, in lumped-parameter systems, method of relating to modal damping, 5228
 reduces effects of resonance on force transducer, 5216
 Damping:
 aerodynamic, in pitch and yaw, of Gemini configurations, errata, 1474
 behavior of DeLavilland stem booms, 11539
 frequency and viscous, of liquids during weightlessness, experimental investigation, 15571
 liquid oscillations in large-scale cylindrical tanks, effectiveness of flexible and rigid ring baffles, 8493
 modal, method of relating to local dampers in lumped-parameter systems, 5228
 reaction jet damping and attitude control system for spinning body, simulation, 8485
 structural composites with viscoelastic shear-damping mechanisms, 6728
 structural joint, effect of model scale, experimental investigation, 18025
 structural response, analysis with different forms, 14450
 Dams:
 arch, preliminary design, guide, 5479
 construction begun in Kazakhstan, 12670
 construction near Alma-Ata, Kazakh SSR, eyewitness report, 14244
 measurement of peak discharge by indirect method, techniques, 9576
 see also names of dams or bodies of water.
 Dancing, plies please, 1011
 Dancer areas, Pacific Ocean, 11641
 Dangerous articles, *see* Hazardous substances.
 Daniel, Price, nomination, hearings, 17639
 Daniels, Raymond B., physiographic history and soils, entrenched stream systems, and gullies, Harrison County, Iowa, 1722
 Danielson, V. A., iron and steel scrap in southeast, 12797
 Danisch, John A., relief, 13584
 Dansby, William L., employee earnings and hours in—
 metropolitan areas of the South, 5071
 nonmetropolitan areas of South and North Central regions, 15447

INDEX 1967

- Danville, Ill., Danville Junior College, land conveyance to, 4496
- DAPAC, danger areas in Pacific, 11641
- Dark adaptation, recovery, effect of wavelength and bandwidth of red light on, 14318
- Darling, John M., wave record program at CERC, 10951
- Darrow, George M.:
strawberry culture, south Atlantic and Gulf Coast regions, 1685
strawberry varieties in United States, 17309
- Darters (fishes):
type specimens (Pisces, Percidae, Etheostomatini), catalog, 6951
- Data, *see* subjects.
- Data access descriptions, 8955, 16028
- Data-collection forms and procedures for census and related surveys, 16041
- Data compression:
first-order polynomial predictor for data compression, 8491
with error-control coding for space telemetry, 11558
- Data compression processors, *see* Processors.
- Data management, 5702
- Data processing, *see* Electronic data processing systems.
- Data recorders, *see* Recording instruments.
- Data storage and retrieval systems, *see* Information storage and retrieval systems.
- Datcherute, Elizabeth, or heirs, relief, 610
- Dates (fruit):
growing in United States, 29
production, use, value, 1965-66, by States, 14696
- Davenport, Iowa:
area wage survey, 6606
bridge across Mississippi River, reconstruction, etc., authorize construction of additional span, report, 2095
motor carrier accident, 1153
population, special census, 8953
- David Taylor Model Basin, report, 11682
- Davidson, Katherine H., preliminary inventory of general records of Housing and Home Finance Agency, 14507
- Davidson, Ronald C., weak turbulence in homogeneous plasma, 8906
- Davidson County, Tenn., housing and urban renewal in metropolitan area, report, 12099
- Davila, Luis Tapia, *see* Tapia Davila, Luis.
- Davis, Chester E., relief, 794, 9257.
- Davis, Donald R., revision of moths of subfamily Prodoxinae, 8535
- Davis, Jefferson C., partial-pressure suit, 10237
- Davis, John G., jr., compressive behavior of plates fabricated from glass filaments and epoxy resin, 9895
- Davis, L. E.:
mineral industry of—
California, 6646
Nevada, 8358
- Davis, R. M., ice surface movement on Tuto ramp in north Greenland, 11983
- Davis, Robert, approach roads, Greenland, 15932
- Davis, Robert T., water supply outlook and Federal-State-private cooperative snow surveys for Washington, 4051
- Davis, Ross D.:
addresses, etc.—
Feb. 17, 1967, 6158
May 27, 1967, 10904
Aug. 8, 1967, 13934
- Davis, Theodore F., radioactive waste processing and disposal, 5786
- Davis, True:
remarks—
Nov. 25, 1966, 1654
Jan. 28, 1967, 5574
Jan. 30, 1967, 7214
Feb. 27, 1967, 7211
Mar. 1, 1967, 7210
- Davis, True—Continued
remarks—continued
May 17, 1967, 11886
Aug. 23, 1967, 15810
- Davis-Bacon act, *see* Government contracts.
- Davis Strait, sailing directions, 9968
- Davidson, Harry W.:
control of nuclear reactor with gaseous control system, 14485
digital computer program for calculating steady temperature, etc., 16987
- Dawes, Richard E., mineral industry of Illinois, 6650
- Day, James V.:
remarks—
Feb. 12, 1967, 6259
Oct. 11, 1967, 16579
- Day care of children:
children in day care, with focus on health, 7513
day care and working mother, magnitude of problem on national scale (talk), 11908
District of Columbia, public services, provide, report, 16383
Federal funds for day care projects, 8702, 10140
nursery enrollment of children under 6, 10937
spotlight on day care, National Conference on Services, proceedings, 1894
working women and day care needs, consultation, preliminary report, 15820
- Dayhoff, M. O., thermodynamic equilibrium in prebiological atmospheres, etc., 11426
- Days, *see* names of special days.
- Daytime programs for children, basic goals and common elements, 4363
- Dayton, Ohio, area wage survey, 11316
- DCA, *see* Defense Communications Agency.
- DCAA, *see* Defense Contract Audit Agency.
- DDE, effects on ecology of salmon streams in southeastern Alaska, 8040
- Deaf:
behavioral aspects, research, conference proceedings, 2967
captioned films for the deaf—
catalog, 7891
program, 10929
law and the deaf, 17183
model secondary school to serve National Capital region, Gallaudet College, establishment, etc.—
law 408
law, legislative summary, 8192
opportunities for the hard of hearing and the deaf through vocational rehabilitation, 1662
workshop for Baptists on deafness and rehabilitation, University of Tennessee, 2968
see also Sign language.
- Deaf-Blind Youths and Adults, National Center for. *see* National Center for Deaf-Blind Youths and Adults.
- Deaf, Convention of American Instructors, *see* Convention of American Instructors of the Deaf.
- Deafness, *see* Deaf.
- Dealers:
commercial seed and planting stock, directory, 8125
gasoline service stations and liquefied petroleum (LP) gas, census of business, 1963, retail trade, 4270
poultry, national improvement plan, participants, 5615
supplement, 10150
subject to certain sections of title 1, National housing act, list, 11010
- Dear student leaders, exchange of correspondence on Viet-Nam, 7143
- Deardorff, Donald K., hafnium-carbon phase diagram, 14340
- de Arias, Maria del C. T., *see* Arias, Maria del C. T. de.

Death:
Federal
fits
vent
infant
Scott
Unit
co
50
infan
1710
life ta
ple o
morbil
3585
mortal
1571
record
regist
fune
med
bo
phys
Death ce
descrip
port
8655
how to
prin
Death o
takes
Death V
inform
de Aubr
Debano,
table
nism,
DeBarr,
pests
chard
Debates
high
cerp
high
cerp
Debentu
Feder
hea
rep
Deblts,
Debt:
debt
sur
farm
home
224
mana
lan
ma
prova
chr
cov
refun
wit
reser
tio
see a
Debtors:
wit
tio
see a
de Bur
de But
Decarb
inhib
bo
medl
ve
toxlo
fie
str
Decapo
Decarb
inhib

Death:

- Federal employees, payment of dual benefits for same death, procedures for preventing, GAO review, 12592
- infant and perinatal mortality in—
 - Scotland, 5466
 - United States and 6 West European countries, international comparison, 8659
- infant mortality in Norway, problems, 17167
- life table functions estimated from sample of deaths, 8657
- morbidity and mortality weekly report, 3585
- mortality, vital statistics of U.S., 7099, 15717, 18190
- records, where to write, 11765
- registration—
 - funeral directors' handbook, 17142
 - medical examiners' and coroners' handbook, 15695
 - physicians' handbook, 13088
- Death certificates:
 - description of diseases frequently reported, training unit for nosologists, 8656
 - how to obtain, compilation, 10701
 - print as Senate document, report, 10782
- Death of a giant, dutch elm disease still takes its toll, 15872
- Death Valley National Monument, general information, 2754
- de Aubri, Pelagie G. F., or heirs, relief, 610
- Debano, Leonard F., formation of non-wettable soils involves heat transfer mechanism, 11124
- DeBarr, Gary L., two new sucking insect pests of seed in southern pine seed orchards, 15283
- Debates and debating:
 - high school topic 1966-67, selected excerpts and references, 2002
 - high school topic 1967-68, selected excerpts and references, 10698
- Debentures:
 - Federal intermediate credit banks, delete interest rate limitation—
 - hearing, 707
 - report, 633
- Debits, *see* Banks and banking.
- Debt:
 - debt pooling, State laws prohibiting or regulating, 5048
 - summary, 16811
 - farm mortgage, 2175
 - home mortgages, estimated, quarterly, 3244
 - management, orchestration, initiative and innovation in central banking (remarks), 9493
 - provable, dischargeability and nondischargeability, authorize bankruptcy courts to determine, hearing, 16420
 - refunding of indebtedness due, agreement with Greece, 8735
 - reserve for certain guaranteed debt obligations, income tax deduction, law, 435
 - see also* Public debt.
- Debtors, accounts, effort to collect or otherwise settle, Farmers Home Administration, GAO review, 4879
- see also* Creditors.
- de Burgh, Juanita C., relief, 262
- de Butts, Edward, relief, 612
- Decaborane:
 - inhibition of aromatic L-amino acid decarboxylase, 14775
 - mediated norepinephrine depletion reversal by methylene blue, 1730
 - toxic, alterations in tissue amines, modified by hydrazines and propynylamines, studies, 7357
- Decapods, *see* Cambarus.
- Decarboxylase, aromatic L-amino acid, inhibition by decaborane, 14775

DeCarlo, J. A., coke and coal chemicals, 5190

Decay (radioactive):

influence of parent and daughter decay on tracer diffusion profiles, 14489

Decay (timber):

cottonwood and willow, stored, relation of visual estimates of decay to specific gravity loss, 2299

Englemann spruce in Colorado, indicators, and associated decay, 6371

factors influencing decay of untreated wood, 8066

heartwood of native species, comparative resistance, 8065

wood decay in houses, how to prevent and control, 17316

Decedent's estates:

District of Columbia escheat cases, settlement by commissioners—

- law, 12175
- reports, 7688, 12380

Deceleration:

hoist is automatically stopped at low deceleration rate, 5213

test vehicle, static longitudinal aerodynamic characteristics, 6897

Decelerators:

aerodynamic wakes, their structure and influence upon, 9808

flexible, towed tension shells, flutter characteristics, 9818

rigid, towed behind massive body, flutter characteristics, 9814

Decennial review conference on cell tissue

and organ culture, 18172

Deception, *see* CamouflageDeciduous fruits, *see* Fruit.

Decision-making:

decisions and control of troops, theory, USSR study, 15366

Federal research and development programs, report, 15001

generating random information for experimental decision problems, 4225

in Federal budget, better information (remarks), 1060

quantitative methods for management, 11591

tactical, skills, generalized, research, 9982

taxation, key factor in business decisions, 1598

updated graphic vs. alpha-numeric information, 10282A

Decision problems, *see* Statistical decision.

Decision Sciences Laboratory, final biennial progress report, 8861

Decisions, dynamic launch decision criteria, system automatically provides, 17974

see also names of courts, etc., rendering decisions—*also* subjects.

Decisions from the field, 16497

Decker, John L., relationship of mycoplasma to rheumatoid arthritis and related diseases, 2833

Declaration of Independence, text, 10691

Decoding, command processors system, 14479

Decomposition:

characteristics of char-forming phenolic polymer used for ablative composites, 6862

generalized theory of finite sequential machines, 18008

slash disposal, laboratory tests fail to confirm acceleration by chemical treatment, 8086

thermal—

kinetic properties of KMnO₄, result of CO₂ irradiation, 11570

uranium oxides in vacuum, USSR study, 16743

Decompression:

hazards in small pressurized aircraft, evaluation, 17414

near-vacuum, heart rate response to, of anesthetized and unanesthetized dogs, 4180

INDEX 1967

Decompression—Continued

- rapid—
 - central nervous system of dog to 1 mm. Hg, residual pathologic changes, 1743
 - foods near vacuum conditions, 1735
 - repeated, cardiovascular responses in anesthetized dogs to near-vacuum exposure, 78
- Decompression sickness, *see* Aeroembolism.

Decontamination:

- BW, with hypochlorite, application to STOP system, exploratory studies, 10012
- naval vessels, USSR study, 8248
- rigging CW-BW water pretreatment decontamination set, airdrop, Army technical manual, 10230

Decoration and ornament, starfishes, ornamental use, 6346

Decorations of honor:

- foreign, acceptance by government officials and employees, establish basic uniform standards—
 - law, 391
 - Ramseyer rule print, 734

- Navy and Marine Corps, ribbons of decorations and awards (poster), 11665
- Order of Isabella the Catholic, award to Eugene J. Keogh, authorize acceptance, 4493

Decoupling:

- multivariable control systems, design and synthesis, 18046
- seismic, at nuclear level, experiment, Project Dribble, Salmon event, Vela Uniform program, Tatum Salt Dome, Miss., 1808-10, 8911

DeCourcy, John, world production and trade, tallow and greases, 4817

Decouvrez un nouveau mode de gastronomie, visitez les Etats-Unis, 17275

Dedicating your new facility, 13056

Dediot, Luis G., relief, 828, 9211, 10529, 12151

Deductions, *see* Income tax.

Deed of trust:

- appointment of new trustees in D.C.—
 - law, 420
 - report, 704

Deer:

- browse resources of Uwharrie National Forest, 8124.
- browsing in northern hardwoods after clearcutting, effect on height, etc., 8109
- key, conservation, law, 388

Deering, R. A., molecular aspects of biological development, 6711

Defense, *see* Civilian defense—National defense.

Defense communications, *see* Military communications.

Defense Communications Agency:

- DCA circulars, 4667-68, 9360, 16455
- DCS equipments/systems performance standardization program, circular, 9360
- Defense Contract Administration Services, traffic management handbook, 10889

Defense Contract Audit Agency:

- auditing career, 16459
- career opportunities for auditors, 9365
- organization, functions, and relationships with General Accounting Office, hearing, 15030
- reviews of contractors' price proposals, GAO report, 6385

Defense contracts, *see* Government contracts.

Defense Department:

- air transportation provided for dependent children of personnel, GAO review, 9545
- annual report, 2149
- appropriations, 1966, supplemental, hearings, 13842

Defense Department—Continued

- appropriations, 1967, civil functions, law, 403
- appropriations, 1967, homeowners assistance—
 - hearings, 7796, 9147
 - reports, 9277, 10564, 10572
- appropriations, 1967, law, 401
- appropriations, 1967, military procurement, report, 2014
- appropriations, 1967, supplemental—
 - hearings, 7736, 7794, 7799
 - law, 9038
 - military procurement and construction, etc.—
 - law, 9035
 - report, 6087
 - reports, 7665, 7667, 7673, 7704, 9268
- southeast Asia military operations—
 - hearings, 6031
 - law, 9035
 - proposal, 4492
 - report, 6087

appropriations, 1968—

- hearings, 9142, 10630, 13840, 16388
- law, 16141
- reports, 13633, 13678, 14987, 15096
- appropriations, 1968, civil functions, hearings, 16393
- appropriations, 1968, military construction, hearings, 15016, 16305, 17637
- appropriations, 1968, military procurement—
 - hearings, 7797, 9149
 - law, 12164
 - reports, 7786, 10570, 10575, 10611

Assistant Secretary, nomination of—

- Fitt, Alfred B., hearings, 17639
- Goulding, Phil G., hearing, 9306
- Wardke, Paul C., hearing, 15148

bidding, etc., costs charged to government contracts, GAO review, 8143

cataloging and standardization program, semiannual reports, 6032, 7739, 16313

cataloging handbook, H series, 975-976, 2144-46, 3283-93, 3322-23, 3325-27, 7847, 10886, 16457, 17688

cataloging manual M (series) 4669, 6140, 12437, 16458, 17689

commanders digest (periodical), 3105

commercial two-way radio equipment, savings available by purchasing rather than leasing, GAO report, 4882

commercial warehouse service plan for general merchandise and refrigerated storage, 15182

construction contracts, awards, need for compliance with truth-in-negotiations act of 1962, GAO report, 12588

contractor operated messing and merchandising services at Kwajalein Missile Test Site, new procedures adopted to improve management, GAO report, 14155

cost or pricing data requirements in award of contracts or subcontracts, GAO report, 4867

cost reduction journal, 3154

cost reduction program, examination, hearings, 713

cost reduction report, 3154

defense industry bulletin (periodical), 3193

Deputy Secretary, nomination of Paul H. Nitze, hearing, 15148

DoD nationwide priority referral system, improved management, 2152

education of dependents overseas, report, 16322

feasibility of using U.S.-owned excess foreign currencies instead of dollars to pay for ocean shipment of military assistance program materiel, GAO report, 4866

Government's interagency motor pool system, potential savings obtainable through increased use, GAO report, 8137

Defense Department—Continued

Granite City Defense Depot, employees relief, 779
 handbook DSAH series, 977, 3195, 4672-75, 6141-44, 7848-52, 9367, 10887-889, 12440, 13909, 17690-691
 handtool and paint stocks, transfer to GSA, GAO review, 9546
 maintenance management, 17858
 management, correspondence course offered by Industrial College of Armed Forces, information booklet, 9697
 manual DSAM series, 978-979, 2147-48, 4676, 6145-47, 7853-54, 9368, 10890-891, 13910-915, 16460-461, 17692-693
 manufacturers part and drawing numbering systems, 2146, 7847
 change, 10886
 Military Affiliate Radio System (MARS), general information, 7859
 military construction and family housing appropriations, 1967, law, 457
 military construction authorization, 1967, report, 623
 military construction authorization, 1968—
 hearings, 13695, 16395
 law, 17555
 reports, 13684, 13688, 16284, 16371
 military handbook, 980, 7860, 9370-71
 military standards, 2154, 4678, 6151, 7861-62, 9372-75, 10899, 12443-444, 13921-924, 15189-198, 16465-471, 17700
 milk procurement, price adjustments, amend U.S. Code—
 law, 410
 reports, 689, 907
 overseas household goods shipments, charges for accessorial services, GAO review, 11152
 overseas schools, extend authority for allocation of funds—
 hearings, 7742, 9153, 12419, 17664
 reports, 9118, 10557
 potential savings on volume movements of household goods from overseas to continental U.S., GAO report, 8138
 procurement of—
 foreign produced aircraft ejection-seat system, GAO review, 4881
 locomotive for Thailand under military assistance program, GAO report, 6380
 printing of technical manuals from equipment contractors, GAO report, 2345
 procurement, personnel, etc., investigation—
 authorization, report, 6009
 expenses, reports, 7677, 14979
 regulations DSAR series, 15182
 savings attainable in use and pricing of certain nonperishable foods, GAO report, 2352
 selling to military, general information, 2158
 small business and labor surplus area specialists, list, 7866
 specifications and standards, index, 13920, 15188
 supplements, 3412
 standardization documents, supply classification listing, 3324, 13919
 standardization manual M (series), 3893
 standardization policies, procedures, etc., manual, 3893
 surplus personal property, how to buy, 10897
 telephone service to military family housing occupants, methods used to provide, GAO review, 6383

Defense Department—Continued

travel regulations, civilian personnel, 3456
 United States agencies in Vietnam, audit and inspection programs, 1966, GAO review, 9553
 use of spare Government-owned communications circuits in Europe, GAO report, 16672
 Vietnam commercial import program, AID's management and operation, GAO review, 15302
 your professional auditing future, Defense Dept., 4683
 Defense disposal manual, 9368, 10890
 changes, 6146, 7853-54
 Defense facilities, see Plants (Industrial).
 Defense industry bulletin (periodical), 3193
 Defense materials, see Materials—Strategic materials.
 Defense Materials System and priorities, questions and answers, 7452
 Defense procurement circular, 3194
 Defense production, see Production.
 Defense production act, see Production.
 Defense Production Joint Committee :
 annual report, 2036
 committee print, 4460
 hearings, 12185-186, 13543, 14916
 Defense Supply Agency :
 civilian career program for automatic data processing, 13910
 defense supply system, savings available by eliminating low-cost, low-demand spare parts, GAO report, 17815
 field establishment directory, 6144, 13909
 handbook DSAH series, 977, 3195, 4672-75, 6141-44, 7848-52, 9367, 10887-889, 12446, 13909, 17690-691
 index of publications and forms, 3195
 introduction to, general information, 7858
 manual DSAM series, 978-979, 2147-48, 4676, 6145-47, 7853-54, 9368, 10890-891, 13910-915, 16460-461, 17692-693
 MILSTRIP, military standard requisitioning and issue procedures, manual, changes, 6153, 15199
 poster, let's face it, security is up to you, 10901
 procurement regulation, revision, 3196
 regulations DSAR series, 15182
 traffic management handbook, change, 6142
 Defense systems resources in civil sector, 17371
 Defense traffic management handbook, change, 6142
 Defense utilization manual, 4676
 change, 2148
 Definitions and abbreviations, FAA, 1038, 9441, 12488, 1400
 Definitive designs for naval shore facilities, 15619
 Deflection :
 Dynalect evaluation for non-destructive testing of pavements, 16524
 shock induced, accurately measured with spiral spring/strain gage combination, 1468
 Deformations (mechanics) :
 deep mine stress determinations using flatjack and borehole deformation methods, 6676
 laboratory stress-deformation characteristics of soils under static loading, 2596
 prebuckling influence on buckling load of truncated conical shells under axial compression, 5187
 shallow spherical sandwich shells under local loading, 6895
 tantalum alloys resist creep deformation at elevated temperatures, 6748
 uniform, provided by porous mandrels in hydrostatic powder metallurgy, 12916
 Degreasing of titanium to minimize stress corrosion, 11476

INDEX 1967

Degrees (colleges, universities, etc.) :
 changing pecking order (address), 17716
 degree profile and contributions of Federal
 funds for academic science, etc., 14560
 engineering (1964-65) and enrollments
 (fall 1965), 13953
 Hungary—
 doctor and candidate degrees awarded,
 1232
 doctors and candidates of sciences, list,
 9632, 14218
 master's and higher, enrollment, fall 1964,
 final report, 2182
 DeHavilland aircraft, *see* Aircraft.
 Dehydrated foods, *see* Dried foods.
 Dehydration, *see* names of commodities.
 Dehydrogenase, lactic, substrate protection
 against ionizing radiation, studies, 14774
 Delissler, Robert G. :
 effects of combined buoyancy and shear on
 weak homogeneous turbulence, 11542
 weak locally homogeneous turbulence and
 heat transfer with uniform normal
 strain, 5254
 Deltschman, Glenn H., diameter growth of
 western white pine following precom-
 mercial thinning, 4826
 Deltz, Victor R., adsorption of carbon dioxide
 on carbon solids, graphite and diamond at
 0°C, 5351
 DeJarnette, Fred R., two different interpre-
 tations of measured dissociation-rate con-
 stants, and their effects on coupled vibra-
 tional-dissociational flows of oxygen over
 wedge, 12943
 De Jongh, Guillermo Fresco, *see* Fresco De
 Jongh, Guillermo.
 Delambre, AIC 78 A, lunar chart, 7331
 Delaney, Donald J., military review, 3558
 Delaware :
 area measurement reports, 7457
 census of agriculture, 1964, State and
 county statistics, 7507
 census of manufacturers, 1963, area sta-
 tistics, 153
 census of mineral industries, 1963, area
 statistics, 5829
 climatological data, 3096
 county business patterns, 1859, 12045
 electric rate book, 4773
 precipitation data, hourly, 3401
 site index of sweetgum stands in relation
 to soil characteristics, 4832
 women, labor laws, summary, 8794
 Delaware River and Valley :
 estuary, comprehensive study, summary
 of preliminary report and findings, 2272
 Martinsburg formation, Pa.-N.J., middle
 and upper Ordovician, 6395
 Delaware River Basin Commission :
 appropriations, 1967, law, 403
 appropriations, 1968—
 hearings, 10634, 16393
 report, 13678
 Delay lines, inductive delay line pickup, use
 in heterodyne phase shifter to provide
 stepless phase shift, 16977
 Del Baglivo, Anna, relief, 12229
 Del Campo, Roberto Matrin, *see* Martin Del
 Campo, Roberto.
 de Leeuw, Frank, revised index of manufac-
 turing capacity, 4790
 Delevan National Wildlife Refuge, mam-
 mals, list, 8030
 Delgado, Antonio Rondon, *see* Rondon Del-
 gado, Antonio.
 Del Grosso, V. A., systematic errors in ultra-
 sonic propagation parameter measure-
 ments, pt. 3, Sound speed by iterative re-
 flection-interferometry, 9983
 Delinquency, *see* Juvenile delinquency.
 Delinquent children, *see* Juvenile
 delinquency.
 Deliroglu, Konstadyna B., and son, relief,
 539

Del Norte County, Calif., forest statistics,
 4860
 DeLoach, D. B., collective bargaining for
 poultry feed prices, California, 7944
 Delta County, Colo., Delta-Montrose area,
 soil survey report, 15747
 Delta launch vehicle, *see* Spacecraft.
 Delta National Wildlife Refuge, birds, list,
 17781
 Delta wings, *see* Wings (aircraft).
 Del Valle Dam and Reservoir, Alameda
 County, Calif., State-constructed, planned
 Federal contribution toward cost, Corps
 of Engineers (civil functions), Army
 Dept., GAO review, 6384
 DeMaine, P. A. D., solid system, numeric
 compression, alphanumeric compression,
 14519
 Demand, *see* Supply and demand.
 Demineralization of saline water, *see* Water.
 Deming, Frederick L. :
 remarks—
 Nov. 22, 1966, 2946
 Dec. 8, 1966, 2953
 Sept. 15, 1967, 17270
 Oct. 19, 1967, 18241
 Democracy :
 continuous living process (remarks),
 15810
 dissent and democracy (address), 12531
 labor-management relations, 25 millionth
 vote, milestone in industrial democracy
 (remarks), 6939, 8532
 scientific management and democracy, East
 Germany, book review, 16759
 Democratic Republic of the Congo (Kin-
 shasa), *see* Congo (Kinshasa).
 Demodulators threshold reduction tech-
 niques study, 6716
 Demography :
 family planning programs in developing
 countries, 8227
 osteoarthritis in adults, demographic char-
 acteristics, 5468
 DeMolina, Eladio R., relief, 12335
 Demolition, *see* Wrecking.
 Demonstration projects, *see* Recreational
 areas and demonstration projects.
 de Moya, Ena H. Mourino, *see* Mourino de
 Moya, Ena H.
 Denardo, B. Pat., projectile size effects on hy-
 pervelocity impact craters in aluminum,
 14468
 Denaro, John (Giovanni) :
 relief, 13752
 DeNauw, Lois J., foreign trade regulations
 of Republic of Korea, 16106
 Dendrometers, dial-gage, accuracy of mean-
 growth estimates, 8079
 de Neufville, Richard, how good are our
 schools? Armed Forces qualification test
 provides clue, 1005
 Denial and probation orders currently affect-
 ing export privileges, 11227
 Denman, James E., relief, 16173
 Denmark :
 air transport services agreement, 7153
 background notes, 18221
 educational system and problems, 9397
 mineral industry, minerals yearbook chap-
 ter, 8346
 selling in Denmark, 233
 Denningham, R. L., transmission of light
 through plane water surface and its return
 by submerged retroreflector, 13031
 Densitometers :
 electromechanical instrument continuously
 measures density of flowing fluids, 9844
 liquid hydrogen, utilizes open-ended micro-
 wave cavity, 11452
 Density :
 alpine snow covers, densification, 15933
 atmospheric—
 between altitudes of 180 KM and 300
 KM, investigation, 8860

Density—
 atmos-
 upper
 u
 body
 Ft.
 core a
 oil
 distrib
 hea
 169
 electro
 mea
 ties
 electro
 mea
 gas, li
 glow
 exte
 hot w
 metal
 met
 179
 miner
 pheno
 for
 power
 114
 surface
 Density
 Denso
 depos
 Dental
 8576,
 Dental
 ment,
 Dental
 Dental
 Dental
 exam
 regist
 Dental
 item
 logi
 Dental
 slons
 Dental
 Dental
 Nation
 18187
 Dental
 collec
 sor
 tio
 expa
 187
 flow
 ma
 in
 therm
 Dental
 guide
 3290
 Dental
 ment
 Identif
 of p
 clinic
 Dentist
 actual
 po
 carle
 wi
 denta
 ch
 deata
 Al
 18
 gran
 res
 86
 grou

Density—Continued

atmospheric—continued
upper stratosphere and mesosphere measurements, 17012
body composition of military population, Ft. Carson, 1963, report, 120
core samples from wells in Appalachian oilfields, 11353
distributions, calculating, in gas containing heat sources, digital computer program, 16987
electron-bombardment ion-thruster beam, measurement of ion and electron densities, 5244
electron, concept for using laser beams to measure in plasmas, 6807
gas, light scattering measurements, 11490
glow discharge density sensor probe life extended, 14430
hot wire techniques in low density flows with high turbulence levels, study, 6841
metals, measurement in extreme environments by radiation counting technique, 17922
minerals, 17818
phenolic nylon, effect on ablative performance, 9889
power-spectral-density computer program, 11481
surface water, Pacific Coast, 17466
Density stratification, *see* Stratification.
Denson, Norman M., some bauxite and clay deposits in northeastern Alabama, 2357
Dental administration, Navy manual, change, 8576, 14584
Dental assistants, examination announcement, 12104
Dental care, *see* Dentistry.
Dental caries, *see* Teeth.
Dental hygienists :
examination announcement, 12104
registered, facts for counselors, 1591
Dental instruments and apparatus, Federal item identification guides for supply cataloging, supplements, 3290
Dental kits, emergency, for use on space missions, development of encasement, 17353
Dental officers, *see* Dentists.
Dental research, spectrum of dental research, National Institute of Dental Research, 18187
Dental science :
collection of human parotid fluid by Carlson-Crittenden device, further modification, 10240
expanding world in biomedical research, 18173
flow rate effect on parotid fluid calcium magnesium, and protein concentrations in human, 10239
thermography of human dentition, 17357
Dental supplies, Federal item identification guides for supply cataloging, supplements, 3290
Dental technicians, examination announcement, 12104
Dentifrices, stannous fluoride as constituent of prophylactic paste and in dentifrice, clinical evaluation, 14319
Dentistry :
actuarial services for dental service corporation, 11714
caries increments evaluation with bite-wing roentgenograms, 14321
dental administration, Navy manual, change, 8576, 14584
dental services for American Indians and Alaska natives, annual reports, 2810, 18159
grant programs in dental public health, research, research training, fellowships, 8632
group practice facilities, financial assistance for constructing and equipping, law, 465

Dentistry—Continued

group practice facilities—continued
summary, section-by-section analysis, legislative history, and conference report, 725
military dependents, dental care needs, hearings, 16306
military medical benefits act of 1966—law, 365
report, 664
preventive, school program, feasibility study of use of stannous fluoride mouthwash, 17352
prints relating to dentistry, 12995
stannous fluoride as constituent of prophylactic paste, as topical solution, and in dentifrice, clinical evaluation, 14319
student loan program, 5455
Dentists :
Armed Forces dental officers, provide promotion opportunities, report, 14943
employed by District of Columbia, exemption from licensing requirements—law, 17560
reports, 10559, 16384
in Indian health, 8627
internships, Public Health Service hospitals, 15679
residency training under public health traineeship program, 7096
Veterans Administration instructions to participating dentists on fee basis, 7219
Denton, Thomas C. :
mineral industry of—
Kenya, Tanzania, and Uganda, 8355
Rhodesia (Southern Rhodesia), Zambia, and Malawi, 12806
South Africa, Republic of, 9760
regional mineral industry review of Africa, 12812
Denver, Colo. :
area wage survey, 8311
Engineering and Research Center, Reclamation Bureau, 11768
mineral aggregate industry, impact of urbanization, 6637
Deonigi, D. E., formation of transuranium isotopes in power reactors, 124
Department stores, *see* Stores.
Dependent children, *see* Children.
Dependents, *see* Air Force—Armed Forces—Army—Pay, allowances, etc.—Veterans.
Depletion equations, *see* Equations.
Deportation cases suspended, reports, 15075-76
Deposition, *see* Plating—Sedimentation and deposition.
Depository libraries, *see* Libraries.
Deposits (soldiers, etc.) :
Armed Forces savings program, allotments for missing persons, etc., reports, 16266, 17626
Interest lost on deposit accounts of enlisted members, adjust—law, 451
reports, 686, 932
Depots, *see* Storage.
Depreciation :
accelerated depreciation allowance, restore—
hearings, 7764, 7804
law, 12163
legislative history, 13719
message from the President, 9063
reports, 7711, 7713, 9271, 10614
accelerated depreciation allowance, suspend—
hearings, 952
law, 504
law, summary, 4566
legislative history, 2064
report, 677
Senate amendments, summary, 4568
depreciable property, farmers, tax deduction from gross income for assessments for soil or water conservation or drainage districts, report, 7690
income tax information, 4916

INDEX 1967

Depressants, *see* Hypnotics and sedatives.
 Deprivation (sensory), *see* Sensory deprivation.
 Depth of flash optical landing system, 13032
 Depth perception, *see* Perception.
 Deputy Commander, Allied Forces in Europe, headquarters, agreement with France, 7170
 Derdul, Joseph D., liquid outflow from cylindrical tanks during weightlessness, 2720
 Derr, V. E., propagation of millimeter and submillimeter waves, 15511
 Derrickson, Gardner F., motor vehicle abandonment in U.S. urban areas, 7451
 Desalination:
 brackish water conversion demonstration plant—
 Roswell, N. Mex., report, 16718
 Webster, S. Dak. report, 15327
 dedication of Clair Engle desalting plant (remarks), 15324
 desalting for Athens, Greece, preliminary study, 10314
 desalting of water supply in Texas, potential contribution to future supply, 15328
 direct freeze separation process using refrigerant R-C318, 12644
 distillation equipment in city of Shevchenko, diagram, equipment design, etc., USSR, 11270
 electrosorption and desorption, 6445
 foam fractionation of inorganic solutions, 12642
 Freeport, Tex., plant, annual report, 17848
 international symposium on water desalination, proceedings, 9587, 11214-215
 large-scale, evaluation of liquid-liquid heat transfer, 14200
 membranes, by reverse osmosis, study, 6448
 multistage flash process, cost studies, 15329
 pilot plant reverse osmosis, operation, 2395
 plants, utilization of waste brines, feasibility study, 14196-197
 policy considerations in desalting and energy development and utilization, 15969
 reverse osmosis process, permeability requirements of membranes, 15331
 sea water conversions, conceptual design of—
 desalination plant, 2396
 fifty million gallon per day plant, 8216
 one million gallon per day plant, 15330
 ultrathin reverse osmosis membranes, fabrication and evaluation, 12641
 use of waste heat for production of fresh water, 6450
 USSR technical publications, translations, 13313
 see also Sea water.
 Desalting of sea water, *see* Sea water.
 Deschler, Lewis, Constitution, Jefferson's manual, and rules of House of Representatives, 7593
 de Schmetzing, Hannibal, utilization of infrared spectrophotometry in microcontaminant studies in sealed environments, 8869
 Descriptive cataloging, *see* Cataloging.
 Descubra um mundo novo em culinária, visto os E.U.A., 17276
 Desegregation in education, *see* Race problems.
 Desert National Wildlife Range, general information, 6353
 Deserts:
 Central Asia—
 formation, and nature of Sinkiang, study, 6585
 Hohsi corridor, Tsaidam, and Tarim basin, USSR book, 16777
 see also names of deserts.

Deshler-Morris House, general information, 6979
 Design and development of automatic indirect blood pressure monitoring device, 73
 Design manual DM series, 2764-66, 13016, 14565-66, 17063-66, 18095
 cumulative index, change, 2766
 Design procedure for weight optimization of straight finned radiators, 6781
 Design review, *see* Reliability (mechanical).
 Designs (aircraft):
 crash survival design guide, 13309
 method for optimal attitude regulator for spinning space station, 6894
 Designs (architectural), *see* Architecture.
 Designs (industrial):
 analytical technique permits comparison of reliability of alternate mechanical designs, 15491
 hardware, NASA data retrieval system provides unlimited information, 11484
 lightweight structural design techniques for lightweight fans, 117
 shelter design and analysis, fallout radiation shielding, 14847
 structural design concepts, some NASA contributions, 16932
 technology and manpower in telephone industry, 1965-75, report, 5036
 turbine blade root design concept promises superior alignment, 6782
 Designs (patents):
 in official gazette, 3650
 Desiliconizing, aluminate solutions, USSR study, 9645
 Desks, wood, flat top and typewriter, Federal acquisition, cancellation, 6310
 Des Moines, Iowa, area wage survey, 11315
 Desolation Valley, primitive area of Sierra Nevada, Calif., mineral resources, 11169
 Desorption, desalination by electrosorption and desorption, 6445
 Desoxyribonucleic acid:
 DNA content in tumor cells of human brain, cytospectrophotometric research, USSR study, 12757
 mechanisms of action of AET, protection of DNA against ionizing radiation by GED, 5713
 sympathetic ganglion cells and acridine orange-DNA spectra, USSR study, 12702
 Despinning, tangential yo-yo despin device on rotating body, three-dimensional analysis, 6888
 Desserts, Army recipes, technical manual, 8886
 DeStefano, Giuseppe, relief, 16185
 Destruction of salmonellae, 8
 Desulphurization, Great Salt Lake brines and sea water, preliminary studies, 6688
 Detection and investigation of attempted criminal violations of tax law, 16721
 Detection of entrapped moisture in honeycomb sandwich structures, 11453
 Detectors:
 Campbell techniques, application to reactor control systems, 7422
 continuous wave detector has wide frequency range, 17994
 infrared, use of twin helix system to produce fast scan, 6800
 light source improved, photocell shadowing technique, 2674
 measures power in 50 to 30,000 GHz radiation band, 6751
 photoionization, improved soft X-ray, 9838
 remote sensing systems, survey of detectors and dynamic calibration methods, 9809
 simple mercury vapor for geochemical prospecting, 9568
 tunnel diode low-level detection behavior, analysis, 11493
 see also Phase detectors.—Proportional counters.

Determin
by its
De Toft
Detonat
symp
sym
Detroit
area
Feder
V.
Detroit
train
Determ
Tuxce
Deul, M
traliz
Deurb
prepu
Ra
Up
Deuteri
envir
ling
therm
deu
and
Deuteri
Deutero
break
ticl
(d, a
alu
e
flu
t
sea
Devan
relati
and
Develop
Develop
velop
Develop
Field
Comm
Alask
Develop
attitu
Devieru
Deviat
devia
bilit
Devices
accur
flow
auton
ing
contr
devic
vec
explor
pro
mech
diff
medic
stu
telegr
cor
Devil C
source
Devils
volcan
Devine,
adult
Devoe,
forma
DeVoe,
2746
Devonia
raphy
Jerse
11167

- Determination of regularity of automation by its canonical equations, 6581
 Do Toffoli, Mercedes, relief, 12221, 17495
 Detonations:
 sym pathetic, studies, 5131
 symposium, proceedings, 13030
 Detroit, Mich.:
 area wage survey, 11319
 Federal office building, name for Patrick V. McNamara, reports, 670, 886
 Detroit Skills Center, Detroit, Mich., good training, good jobs, 16500
 Detterman, Robert L., geology of Iniskin-Tuxedal region, 8163
 Deul, Maurice, mine water research, neutralization, 9792
 Deurbrouck, Albert W.:
 preparation characteristics of coal from—
 Randolph County, W. Va., 2578
 Upshur County, W. Va., 14355
 Deuterium:
 environment, cytology advanced by studying effects, 16881
 thermal conductivities of ordinary and deuterated gaseous hydrogen fluoride and their equimolar mixture, 12961
 Deuterium oxide, *see* Heavy water.
 Deuterons:
 breakup mechanism by 42-Mev alpha particles, 18052
 (d, α) reaction on—
 aluminum-27, investigation, 6852
 errata, 14448
 fluorine 19 and nitrogen 15, interpretation, 9873
 scandium 45, differential cross section, 16989
 Devan, Thomas A., records of Dept. of State relating to political relations between U.S. and Honduras, pamphlet, 18065
 Development, *see* Underdeveloped areas.
 Development (economics), *see* Economic development.
 Development digest (periodical), 3202
 Development Planning in Alaska, Federal Field Committee for, *see* Federal Field Committee for Development Planning in Alaska.
 Developmental instrument supplies accurate attitude and attitude-rate data, 6770
 Devereux, John R., relief, 854
 Deviation measuring system, FM carrier deviation measured by differential probability method, 12917
 Devices:
 accurately measures and records low gas-flow rates, 2677
 automatic indirect blood pressure monitoring device, design, etc., 73
 control, for automotive vehicles, Federal standard, 6317
 device measures reaction engine thrust vector deviations, 6804
 exploding bridge wire, pulse technique provides more accurate checkout, 2672
 mechanical, accurately measures RF phase differences in VHF or UHF ranges, 6848
 medical electronics, development, USSR study, 1264
 telegraph devices, input-output for digital computer systems, USSR study, 1254
see also types of devices.
 Devil Canyon, primitive area, mineral resources, 8155
 Devils Postpile quadrangle, Calif., Cenozoic volcanic rocks, 14170
 Devine, Brian, mean blood hematocrit of adults, 10069
 Devoe, Donald B., human processing of information in weather forecasting, 8862
 DeVoe, James R., radiochemical analysis, 2746
 Devonian period, Lower Devonian stratigraphy of northeastern Pennsylvania, New Jersey, and southeasternmost New York, 11167
 DeVore, Sablene E., relief, 12336, 16195, 17507
 DeVries, Leonard L., investigation of atmospheric density between altitudes of 180 KM and 300 KM 8860
 Dew, D. M. & Sons, Inc., relief, 16172
 Dew point, radiosonde, accuracies 40°C to -40°C, 15884
 DeWinter, F., parametric cost studies of multistage flash process, 15329
 Dexter Manor, Providence, R.I., health services, 5456
 DeYoung, Alan, relief, 777
 DHIA, *see* Dairy herd improvement associations.
 Diabetes:
 characteristics of persons with diabetes, 14035, 18189
 literature index (periodical), 3203
 cumulative edition, 14621
 relationship to number of pregnancies, 1960-62, United States, 5469
 treatment of diabetics at Polish health resorts, 17865
 Diagnosis, television and X-ray, USSR study, 1257
see also names of diseases.
 Diagnostic tests of color defective vision, bibliography, 17411
 Diakides, Sevasti, relief, 13619, 13781, 14897
 Dialogue on adolescence, 4365
 Dials and pointers, Federal item identification guide, 17697
 Dialysis:
 electrical analogue for electro dialysis, study, 9591
 electro dialysis, application of inorganic ion-exchange membranes, 8214
 Diameter distributions in natural yellow-poplar stands, 9544
 Diamond, Arnold H., public facility needs and financing, 1977
 Diamond, Norene M. annual digest of State and Federal labor legislation, 14281
 Diamond drilling, statistical regression analysis, drillability studies, 2584
 Diamonds:
 adsorption of carbon dioxide at 0° C, 5351
 drill core, gold distribution from Homestake Mine, Lead, S. Dak., 6679
 industrial, acquisition for stockpile, balance-of-payments aspects of contracts, GAO report, 15293
 industrial, disposal from national and supplemental stockpiles—
 law, 436
 reports, 683 920
 Diapole antennas, *see* Antennas.
 Diary of T.I.D.E. Counselor, summer 1966, 7923
 Diatomaceous earth:
 evaluation, as protectant against insects in sorghum grain, in small bins, 11933
 shelled corn protectant against insects in small bins, 36
 Diaz, Beatriz, relief, 311, 595, 816
 Diaz, Carlos M. Calonge, *see* Calonge-Diaz, Carlos M.
 Diaz, Jose C. Suarez, *see* Suarez-Diaz, Jose C.
 Diaz, Jose E., relief, 557
 Diaz Franquiz, Jose J., relief, 572
 Diaz Martinez, Eleanor R., *see* Diaz, Beatriz.
 Diaz Zayas, Bazan, Juan R., relief, 9235, 13487 13592
 Dibbles, Thomas W. Jr., areal geology of Western Mojave Desert, Calif., 17824
 Dicarboxylic acids, electron paramagnetic resonance and magnetic susceptibility of Cu (II) compounds, USSR study, 14252
 DiCarlo, Daniel J., light observation and large load-lifting helicopters, 16983
 Di Carluccio, Annunziata, relief, 10546
 2', 5-dichloro-4'-nitrosalicylanilide, *see* Bayer 73.

INDEX 1967

Dichromates, common names shipping containers, etc., technical reference, 9735
 Dickinson County, Mich., Menominee iron-bearing district, geology, 6398
 Dickson, P. F., infrared reflectances of metals at cryogenic temperatures, 6922
 Dictionaries:
 Alaska place names, 14174
 Chinese, in all languages, list, 7144
 communications-electronics terminology, 8856
 international agricultural trade, terms used 9524
 occupational titles, 3d edition—physical demands, working conditions, and training time data, supp., 6205
 suffix codes for jobs defined, 9417
 corrections and additions, 10946
 Seneca Indian language, 13001
 Dicyandiamide:
 duty-free treatment—law, 10483
 reports, 7696, 7787, 10563
 Didymium metals, electrowinning from their oxides, 11384
 Dielectric beamsplitters, *see* Beamsplitters.
 Dielectrics:
 constants and dissipation factors for 6 rock types between 20 and 100 megahertz, 9785
 covers, effects over cross slots in rectangular waveguide 18027
 dielectric properties of promising materials for cryogenic capacitors, study made, 17977
 input admittance of coaxial transmission line opening onto flat, dielectric-covered ground plane, 16993
 resonant frequencies of sphere immersed in plasma, 12929
 temperature dependence of constant of milnesmuscovite, at varying frequencies, USSR study, 16737
 Dies (metal-working):
 industry, problems, etc., hearings, 2061
 Diesel fuel, *see* Fuel oil.
 Diesel locomotives, *see* Locomotives.
 Diet:
 Alaska dietary survey, 14623
 chemically defined, factors affecting efficiency, 17351
 effects on:
 body compartments of rats, 10295
 intestinal and skin flora—experimental data, 9799
 literature survey, 2613
 purified diets, response of channel catfish fingerlings, 8042
 recipes, seafood slimmers, 8026
 salmon, caloric and vitamin levels, studies 8042
 special dietary regulations of FDA, recommended allowances, etc., 6359
 Dietitians, Veterans Administration, Interns 13173
 Dietrich, Raymond A., price information and meat marketing in Texas and Oklahoma, 13941
 Dietrich, Wendell F., corrosion test program, 9594
 Differential equations, *see* Equations.
 Differential neutron thermalization, summary report, 13323
 Diffraction:
 Fresnel diffraction plates are simple and inexpensive, 16945
 isotopic X-ray sources for portable stress analysis equipment, feasibility, 14809
 vector diffraction theory, applications to terrain, 7935
 X-ray, powder patterns, 15591
 Diffractometers, neutron, allow both magnetic and crystallographic analyses, 12835
 Diffusion:
 anomalous, onset in electron-bombardment ion thruster, 2710

Diffusion—Continued
 binary, in exponential medium, 2704
 free-molecule flow and surface diffusion through slots and tubes, summary, 8598
 impurities into silicon from gaseous sources, 1421
 silver plating ensures reliable diffusion bonding of dissimilar metals, 11461
 theory of thermionic converters, USSR study, 15390
 Diffusion equations, *see* Equations.
 Digestive system, tolbutamide influence on cholinesterase activity, Rumanian study, 1261
 Digests, *see* Index digests—also names of departments, etc., issuing digests—also subjects.
 Digges, Thomas G., heat treatment and properties of iron and steel, 2739
 Digital adaptive control system, *see* Control systems.
 Digital computer systems operators:
 examination announcement, discontinuance notice, 14862
 trainee, career opportunities, IRS, 6454
 Digital computers, *see* Electronic computers.
 Digital fibrograph, *see* Fibrograph.
 Digital filters:
 non-real-time data processing, 17935
 random process theory aids digital data processing study, 16952
 Digital frequency counter permits readout without disturbing counting process, 6818
 Digital magnetic tape system for recording radar data, 17096
 Digital system detects binary code patterns containing errors, 2647
 Digital-to-analog converters:
 operation from low level inputs, 17968
 rate augmented, design and analysis, 18036
 Digitizers:
 displacement digitizers, USSR study, 1820
 Randle Cliff radar digital range-measuring instrument, 18114
 see also Analog-to-digital converters.
 Dill, Henry W., Jr., worldwide use of airplanes in agriculture, 17304
 DiLuizio, Frank G., remarks, Oct. 16, 1967, 16719
 Dimethyl sulfoxide, toxicity to fish, 16624
 Dimick, B. M., liquid heaters and vaporizers, classification definitions, 18122
 Dimond, Nancy, Navy Supply Corps newsletter, 3616
 Dinger, Cloyd H., computer programs in oceanography, 14570
 Dingman, Robert J., geology and groundwater resources of northern part of Salar de Atacama, Antofagasta Province, Chile, 11164
 Diodes:
 avalanche-drift diode and its use in microwave engineering, USSR study, 12750
 computer program searches characteristic data, 2654
 diode-Iris controlled waveguide slot radiators, feasibility study, 9812
 discriminator threshold attenuation, transistor biased amplifier minimizes, 16883
 fused diode provides visual indication of fuse condition, 14431
 heterodyne operation of avalanche photodiodes, 18023
 millimeter wave, for efficient harmonic power generation, 11483
 minority carrier storage, used by laboratory pulse modulator, 14428
 Monte Carlo code for solution of planar electron-diode problems including electron-neutral elastic collisions, 15558
 reliability prediction technique, 6720
 SiC/Si diode trigger circuit provides automatic range switching for log amplifier, 17957

Diodes—
 tunnel
see also
 Dioloximes
 Diplomac
 Diplomati
 matic
 Diplomati
 Ruman
 Diplomati
 Diplomati
 tions.
 Diplomati
 diplom
 me
 Vienna
 act
 Dipole m
 electri
 lect
 plasmas
 men
 Diptera.
 Direct co
 Directio
 Director
 Aeros
 and
 airport
 302
 archite
 firm
 ana
 Atom
 for
 Bulgari
 CAP
 ces
 comm
 ing
 comm
 Cong
 90
 pic
 credi
 sou
 DSA
 Econo
 pro
 educ
 hig
 pu
 St
 empl
 ca
 15
 empl
 50
 Feder
 so
 forei
 10
 Fort
 po
 di
 Gover
 pu
 gover
 se
 grad
 le
 guld
 in
 Hea
 m
 heal
 high
 Indu
 Indu
 50
 infu
 E
 Inte
 E
 Inte
 c

Diodes—Continued

tunnel diode low-level detection, 11493
see also Thermionic diodes.

Dioximes, see Oximes.

Diplomacy, educational and cultural, 7150

Diplomatic and consular service, see Diplomatic couriers.

Diplomatic couriers, visas, agreement with

Rumania, amending agreement, 15789

Diplomatic list, 2908

Diplomatic relations, see International relations.

Diplomats:

diplomatic relations act of 1967, complement Vienna convention, hearing, 10831

Vienna convention on diplomatic relations act of 1967, report, 12387

Dipole moments:

electric, for molecules in gas phase, selected values, 17035

plasma acceleration, based on dipole moment approximation, 5256

Diptera, see Flies—Mosquitoes.

Direct current, see Electric currents.

Directional stability, see Stability of aircraft.

Directories:

Aerospace Research Office key staff offices and laboratories, 7334

airport, airman's information manual, 93, 3021, 10977

architectural, engineering, and consulting firms with certified fallout shelter analysts, 13424

Atomic Energy Commission, specialized information and data centers, 1814

Bulgarian officials, 4934

CAP (Community action programs) grantees, 932, 7873, 10906

commercial seed dealers in seed and planting stock for trees and shrubs, 8125

community wage surveys, 6615

Congress of United States—

90th Cong., 1st sess., 7586

credit information on foreign firms, sources, 15340

DSA field establishment, 6144, 13909

Economic Development Administration, approved projects, 13931

education, 1966-67—

higher education, 16498

public school systems, 10930

State governments, 15211

employment assistance for the handicapped, Federal and State programs, 15664

employment security offices, local, 13970

Federal statistical, 13353

Federal statistics, local areas, guide to sources, 1879

foreign consular offices in United States, 10097

Fortune, 500 largest U.S. industrial corporations, 1954-65, concentration and divisional reporting, etc., hearings, 12415

Government periodicals and subscription publications, 3568

governmental resources, foreign affairs research, 17221

graduates from predominantly Negro colleges, 2483

guidance, counseling, and testing personnel in State Department of Education, 6178

Health, Education, and Welfare Department field directory, 12619

health units, local, 1569

higher education consortiums, guide, 7898

Indian Affairs Bureau, 3210

industry wage and union scale studies, 5072

information resources in U.S. Federal Government, 15458

Interagency Boards of U.S. Civil Service Examiners, 14860

International mail, 10027

changes, 3211

Directories—Continued

labor unions, national and international in U.S. changes, 2498

mental health, 2828

military assistance program addresses, MILSTRIP, 9379, 10900, 12445, 13926

National and Regional Export Expansion Councils, 16099

National Institutes of Health, scientific personnel, 8543

errata, 13090

Naval Weapons Bureau, 3066

Navy prime contractors, selling to, 17100

Negro colleges and universities, 9679

Neighborhood Youth Corps project sponsors, 2486

Peace Corps program, 7037

plastics, knowledgeable Government personnel, 2157

poison control centers, 17139

post offices, 17115

post offices, 1967 national ZIP code directory, 14609

President's Committee on Employment of Handicapped, membership directory, 2491

providers of services under health insurance for the aged—

extended care facilities, 15738

home health agencies, 11793

hospitals, 11794

Public Health Service, public advisory groups, 8650

public training schools serving delinquent children, 4364

recreation areas, Federal, requiring entrance and user charges, 13041

refrigerated warehouses in United States, 5559

Securities and Exchange Commission companies filing annual reports, 13112

smoking and health, on-going research, 11743

standardization activities, organizations in U.S., 15589

standardization, Federal supply classification, class and area assignments, 16474

standardization SD series, 16474

State and territorial health authorities, 15680

State departments of agriculture, 7836

State divisions of vocational rehabilitation and agencies for the blind, 7220

superintendents of large public school systems, 6197

Surplus Property Utilization Office, HEW regional representatives, 8188

telephone—

Agriculture Department, 17387

Atomic Energy Commission, 14810

Commerce Department, 16110

defense mobilization organization, 4460

House of Representatives, 7592

Interior Department, 17850

NASA headquarters, 16926

Senate, 760, 10689

State Department, International Development Agency, Arms Control and Disarmament Agency, 15764

U.S. Government inspection services and testing laboratories, 14048

urban planning assistance program, projects, 12628

urban renewal, 4008, 15725

urban research study centers, 14919

urbanized area transportation planning programs, 17175

wage chronologies, 11331

water pollution control, 17767

Directors:

Project Head Start, guide for directors and health personnel, 12450

State civil defense directors, list, 14844

State surplus property, directory, 8188

INDEX 1967

Dirks, Harlan J., financing livestock exports, 14076
 Dirksen, Everett M., Republican report, 89th Congress, 2d session, supplement, 4572
 Disability, *see* Civil service pensions.
 Disability insurance:
 benefit awards, 1959-62, men under age 65, data, 7079
 rights and responsibilities of recipients of social security disability insurance, 11800
 social security disability benefits, find out if you are eligible, 2864
 social security program, what professional people who work with the disabled should know, 2862
 social security rulings, 2872, 3881
 see also Old-age, survivors, and disability insurance.
 Disabled:
 Federal employees, payment of dual benefits for same disability, procedures for preventing, GAO review, 12592
 health insurance, provide, hearings, 7763, 10684
 help through vocational rehabilitation, 17182
 interviewing guides, 10944
 multiple handicapped, available Federal services (remarks), 18142
 neurological and sensory impairments, estimated range and cost of disability, 17145
 public assistance, money payments to recipients, 4751
 social security disability applicant statistics, 8691
 workers—
 medical care utilization, data, 17202
 occupational characteristics by disabling condition, 7079
 see also Disability insurance—Pensions—Rehabilitation of the disabled—Veterans.
 Disabled American Veterans:
 audit of accounts by GAO, report, 6005
 legislative program, hearings, 9172
 report, 1966 convention, 4478
 Disadvantaged children, *see* Children.
 Disadvantaged youth, *see* Youth.
 Disarmament:
 arms control and disarmament—
 bibliography (periodical), 3041
 research and studies by Government agencies, report, 4191
 research studies in progress or recently completed, 5531, 13143
 Soviet press materials, translations, 3888
 arms control and limited war, design study, 15924
 documents, 1748, 15925
 United States armament and disarmament problems, hearings, 10836
 Disasters:
 aircraft emergency procedures over water, 3016
 central sterile supply section of packaged disaster hospital, organization, 1577
 Civil Defense Office labor courses references, 14845
 community involvement in civil defense, suggestions by American National Red Cross, 16051
 disaster control and civil defense in Federal buildings, change, 14613
 economic injury loans, management and technical aid for displaced small businesses, 14643
 educational assistance in major disaster areas—
 hearings, 7742, 9153, 12419, 17664
 reports, 9118, 10557
 emergency broadcast system, basic plan, 14016

Disasters—Continued
 emergency escape system uses self-braking mechanism on fixed cable, 5223
 emergency operations, programmed orientation to civil defense, 13431
 emergency rescue, survival, Air Force manual, 10209
 Federal assistance operations, guide, 7019
 Federal disaster act, activities, report, 7603
 groups in disaster (paper), 10049
 if disaster strikes and there is no doctor, medical self-help training, course, announcements, 11738, 13077
 major, additional assistance to areas suffering, law, 473
 major, forest and grass fires control, air operation facilities needed, OEP report, 10702
 print as Senate document, report, 10783
 major, income tax treatment of casualty losses, report, 7694
 national emergency standby regulations and instructions, FPM supplement, 3306
 national, role of licensed practical nurse, 11733
 natural—
 activities, emergency employment of Army resources, 17735
 preparedness, civil defense program materials, 16052
 what Department of Agriculture can do, 10189
 Northeast power failure, Nov. 9-10, 1965, hearings, addendum, 2053
 packaged disaster hospitals materials, catalog and guide for distribution, 13081
 preparing hospital plant for emergencies, 15658
 relief funds, appropriations, 1968, reports, 10600, 15131
 space flight emergencies, survey, 9171
 see also Relief work.
 Disbursements, House of Representatives, detailed statement, 7748, 15036
 Discharge, adverse action, law and regulations, FPM manual supplement, 3300
 Discharges (electric), *see* Electric discharges.
 Disciplinary barracks, confinement of military prisoners, field manual, 4207
 Discipline:
 correction series, 13180-182
 corrections, task force report, President's Commission on Law Enforcement and Administration of Justice, 10031
 Discount companies, food retailing by discount houses, 5652
 Discounts, mortgage, report by HUD, 6091
 Discoverer (ocean survey ship):
 use for ocean environmental research, general information, 9434
 Discoveries (archeological), *see* Archeology.
 Discrimination, *see* Race problems.
 Discrimination in employment:
 age discrimination, prohibit, message from the President, 12198
 Arkansas State Advisory Committee report to Civil Rights Commission, 13434
 District of Columbia government employees, prohibit discrimination in hiring, report, 13824
 equal employment opportunity—
 Federal employment, pamphlet, 1927
 Federal service (remarks), 14610
 federally assisted agricultural programs in Georgia, 16061
 plans for progress program, 11298
 Reclamation Bureau, affirmative program of manpower utilization, 13104
 road to progress (address), 5033
 legal interpretations, Equal Employment Opportunity Commission, 12480
 Negro civil status gains should be accompanied by economic status gains (address), 15593

discrimination in employment—Continued
 progress toward goal of equal employment opportunities (address), 17109
 promote equal employment opportunity, hearings, 13877
 quests for economic stability and equal employment opportunity (remarks), 1065
 seven steps to equal employment opportunity, guide, 4750
 sex discrimination, laws, 17295
 State laws, summary—
 because of age, 5050
 fair employment practice act, 5049
 textiles getting new look under civil rights act of 1964, 13994
 Yuma, Ariz., economic data for equal employment opportunity program, 11771
 Discriminators, digital system provides superregulation of nanosecond amplifier-discriminator circuit, 5147
 see also Frequency discriminators.
 Discussion guide, tape-recorded Department of State briefings, 18227
 Disease Prevention and Environmental Control Bureau, health protection, target, 11734, 17150
 Diseases :
 chronic, comprehensive core services in your community, 5428
 chronic conditions, interview data compared with information derived from medical records, 11762
 chronic, detection and prevention utilizing multiphasic health screening techniques—
 hearings, 2103
 print additional copies, report, 2031
 report, 2104
 chronic illness among residents of nursing and personal care homes, 11764
 ear, nose, and throat disease incidence in 400 space and test pilot candidates, 14781
 health protection, target of Bureau of Disease Prevention and Environmental Control, 11734
 Insect-borne, prevention and control, 11730
 organism reactivity to disease development, USSR book excerpts, 16741
 prevalence of chronic conditions and impairments among residents of nursing and personal care homes, May-June 1964, U.S. statistics, 14639
 publications, price list, 2801
 vibration, prophylaxis, USSR study, 11265
 see also Contagion and contagious diseases—Diseases of animals—Nosology—Occupational diseases—also names or classes of diseases.
 Diseases of animals :
 animal morbidity report—
 calendar year, 13195
 fiscal year, 1671
 monthly, 3029
 see also names of diseases, or animals affected.
 Diseases of fish, fish disease leaflet FDL (series), 4802
 see also names of diseases or fish affected.
 Diseases of insects, see names of insects.
 Diseases of plants :
 calendar of activities from home arborist, pest control, etc., 5676
 control in home vegetable garden, 10171
 intercepted plant pests, lists, 7250
 plant disease reporter, 3688
 see also names of diseases or plants affected.
 Disinfection and disinfectants, classification definitions, 18119
 Disinfection, fruit and vegetables by gamma irradiation, 5794

Disks, sensing, for slug-type calorimeters, invention for higher temperature stability, 11482
 Dislocation of crystals, see Crystallography.
 Disney, Walt, medal, issuance, report, 16360
 Disorientation :
 pilots, fatal effects under either IFR or VFR, 5801
 vestibular, adaptation to—
 eye-movements and subjective turning responses to 2 durations of angular acceleration, 15980
 nystagmic eye movements with opposing stimuli, 7447
 responses to angular acceleration and to bilateral caloric stimulation following unilateral caloric habituation, 10322
 visual fixation on nystagmus and sensations of turning, 15981
 Dispersion :
 aerial dispersal of pink bollworm in U.S. and Mexico, 5678
 alloys, selected submicron powder blending methods, comparison, 6880
 devices, gas motivated solids, design, 6687
 fog dissipation experiments using propane, Walla Walla, Wash., 11984
 oxide dispersion strengthened alloys, 17951
 Displacement :
 chemical, of protons in double-bond, rule for estimating, 12727
 gage, for crack extension measurements, design and use, 1513
 plane-stress analysis of edge-stiffened rectangular plate, subjected to boundary displacements, etc., 16895
 radial, cylinders, thin walled, 17947
 residual strains and displacements within plastic zone ahead of a crack, 5489
 stresses and displacements surrounding open pit in gravity-loaded rock, 14356
 Display of merchandise :
 Budapest International Fair, 12687
 carnation blooms, quality after controlled storage, 15863
 sample display service, new way to find agents and distributors overseas, 4923, 14207
 Display systems :
 alphanumeric map information assembly and display system for large computer, 14142
 cross-pointer-type instrument display in landing with helicopter, 1488
 CRT, computer program samples digital data for display, 14440
 integrated display and control systems, simulator evaluations, 14374
 moving-map instrument display in landing approaches with helicopter, evaluation, 11531
 NRL satellite position display, simplified prediction equations, 5348
 peripheral vision displays, 12865
 pictorial navigation display in instrument departures of supersonic transport, simulator study, 12944
 random-scan display of predicted satellite positions, 9994
 rectilinear display gives acceleration load factor and velocity information, 14439
 satellite position display, computer program, 8595
 satellite, use of NTDS, 14593
 SPAD formatter, buffer interface between satellite prediction computer and display, 8593
 stereoscopic, application to analog computer simulation, 6757
 symbol legibility studies, 63-64

INDEX 1967

Display systems—Continued
 use of displacement, flash, and depth-of-flash coded displays for providing control system information, 5354
 video, new electron microscope employs new technique, 16884

Disposal of refuse, *see* Refuse.

Dissent and democracy, 12531

Dissertations (academic):
 defended by scientific co-workers, Academy of Sciences, Kazakh SSR, list, 11246
 Ukrainian Institutes 1965, mechanics, defended, 1302

Dissociation:
 coupled vibration and dissociation relaxation behind strong shock waves in carbon dioxide, 6908
 equilibrium dissociating air stagnation-point boundary layer with suction and injection, 8499
 measured rate constants and their effects on coupled vibrational-dissociational flows of oxygen over wedge, Interpretations, 12943
 oxyhemoglobin, effect of nitrogen dioxide-nitrogen tetroxide, 13270
see also Electrolytic dissociation.

Distances between U.S. ports, 17465

Distillation:
 desalination equipment in city of Shevchenko, diagram, equipment design, etc., USSR, 11270
 facilities, salt water, federally owned, sale to government of Virgin Islands, Virgin Islands Corporation, Interior Dept., General Services Administration, GAO review, 8146
 low-temperature bituminous coal tar, identification of distillable paraffins, etc., 12795
 thermal sea water, fundamentals of the theory of marine evaporators, 17390
 vapor gap osmotic distillation process, 2394

Distortion:
 equidistance judgments in vicinity of binocular illusion, 139
 voltage effects of SNAP-8 alternator speed controller and alternator performance results, 12950

Distribution (economics):
 dual distribution, hearings, 6115
 problems affecting small business, hearings, 7817
 print additional copies, reports, 916, 2030
see also names of commodities.

Distribution (statistics):
 resource distribution problem in network planning, algorithm for solution, 17868
 Distribution system, *see* Military supplies.

Distributors, *see* Markets and marketing.

Distributors (apparatus):
 distribution equipment, Federal item identification guides for supply cataloging, supplements, 3289

District Court of United States for D.C., *see* United States District Court for D.C.

District Courts:
 District of Columbia—
 liens established by judgment or decree, recordation by recorder of deeds, report, 12385
 transfer authority rel. to marriage license issuance, report, 12384
 jurisdiction to recover fees, etc., for official services over actions, limitation, increase, amend Tucker act, report, 15077
 magistrates act, hearings, 12416

District Courts—Continued
 Mississippi, eastern division of northern district, terms to be held at Ackerman—
 law, 16138
 report, 12379
 North Dakota, term of court at Williston, N. Dak., additional place, report, 12395
 proceedings, affidavits, amend U.S. Code, hearings, 2054
 rules of civil procedure, amendments, 2941
 Texas, western district, new Midland-Odessa division, create, report, 16235
 United States, Federal offenders, 1965 data, 8799
see also Judges.

District of Columbia:
 act for regulation of practice of dentistry, amend to exempt from licensing requirement thereunder dentists employed by District of Columbia—
 law, 17560
 reports, 10559, 16384
 administrative procedures for D.C. government, prescribe, report, 9130
 AEC Speakers Bureau for Washington Metropolitan area, availability of speakers, 5798
 air pollution problems, hearings, 10829, 16318, 16406
 alcoholic beverage control act, amend—
 hearings, 949, 12294
 reports, 14993-994, 16258
 alcoholism, control, prevention, and treatment, hearings, 13702
 appropriations, 1967, law, 456
 appropriations, 1967, supplemental, proposal, 9068
 appropriations, 1968—
 hearings, 7735, 17636
 report, 9120
 area measurement reports, 7457
 area wage survey, 5068
 attachment, exemptions in case of non-residents, amend D.C. code, report, 9086
 automobile liability policies, make motorist coverage required part, report, 13644
 blind persons register, establish, report, 16382
 Board of Education, administration of non-resident tuition act, GAO review, 4576
 Board of Higher Education, create—
 law, 495
 report, 693
 Board of Vocational Education, create—
 law, 495
 report, 693
 borrowing authority for D.C.—
 hearing, 13857
 reports, 13631, 13824
 bridge to East Potomac Park, with visitor facilities, construct, hearing, 750
 budget, 1968—
 amendments, 9075
 departmental edition, 4258
 document edition, 4482
 business corporation act, amend report, 879
 Capitol Grounds and contiguous areas, comprehensive plan for development, report, 10769
 census of manufactures, 1963, area statistics, 1834
 census of mineral industries, 1963, area statistics, 5829
 children, public day care services and foster home care, provide, report, 16383
 code of laws—
 amend, hearings, 2113
 annotated, 1967 edition, 16333
 colleges, public, establish report, 693
 commissioners, authority to lease air space, above, on, and below freeway rights-of-way, hearings, 16407, 17598
 commissioners, hearings, 15022

District of Columbia—Continued

commissioners, remove limit on authority to settle D.C. claims in escheat cases—law, 12175
reports, 7688, 12380
construction authorized, 3133
cooperative extension services, establish, hearing, 16387
council, permit to make rules and regulations under alcoholic beverage control act, etc., amend, report, 16258
county business patterns, 4308, 13367
Court of Appeals, *see*, in main alphabet
District of Columbia Court of Appeals.
Court of General Sessions—
appeal by U.S. from decisions sustaining motions for return of seized property or to suppress evidence, amend U.S. Code, report, 14990
liens established by judgment or decree, recordation by recorder of deeds—law, 1971
reports, 2026, 2102
credit life, health, and accident insurance, for student loans, increase maximum amount allowable, report, 882
creek and the city, urban pressures on natural stream, Rock Creek Park, 4913
crime and criminal procedure bill—hearings, 10644
report, 13646
crime, impact on small business in area—hearings, 12428
report, 16365
deeds of trust, appointment of new trustees—law, 420
report, 704
detailing employees from field positions into D.C., repeal law prohibiting, law, 12163
elected Board of Education act—
hearing, 17597
report, 16260
electric rate book, 4774
Federal payment authorization and borrowing authority act of 1967, hearings, 10646
Federal payment to D.C.—
hearing, 13857
reports, 13631, 13824
fire and casualty act, amend, report, 13644
firearms, prohibit use in certain crimes, hearings, 10644
foreign chanceries sites, commissioners to acquire—
hearings, 6033
report, 7701
Georgetown commercial architecture, Wisconsin Ave. historic American buildings survey, selections, 11616
goal for the Nation's Capital, home rule, representation in Congress, etc., message from the President, 7599
Government—
guidelines needed for custodial and engineering staffing in public schools, GAO report, 12587
reorganization—
hearings, 12301, 15022, 15159
message from the President, 12205
reports, 13690, 14949
withheld reimbursements of rights-of-way costs of Federal-aid highway program, GAO review, 12593
government employees, personal property claims, settlement, report, 10610
Government, organization, etc., investigation—
authorization, report, 6017
expenses, report, 7723
healing arts practice act, amend to exempt from licensing requirements thereunder physicians employed by District of Columbia—
law, 17560
reports, 10559, 16384

District of Columbia—Continued

heliport, lease property—
hearing, 960
law, 12160
reports, 627, 931
historic landmarks, registration, report, 14999
hospital and health facility construction and modernization grants, hearing, 16405
housing in Washington area, Federal employee's guide, 4906
housing regulations, violations, provide for repair of buildings at expense of owner, hearings, 2113
inauguration of the President, provide for travel expenses of sanitarians, etc., report, 7686
income and franchise tax act, amend reports, 879, 893
industrial safety standards, amend law—
hearings, 16320
report, 16296
injuries caused by firearms, etc., mandatory reporting, provide, law, 480
jail inmates, authorize transfer to other institutions notwithstanding pendency of petition for writ of habeas corpus, reports, 878, 12393
John J. Pershing memorial, erection—
hearing, 740
law, 490
legislation, summary report, 4529
life insurance act, amend relative to public announcement of condition of alien companies, report, 16292
Management Department, establish—
hearings, 15022
report, 14949
Marine Corps in Washington, D.C., 11342
mass transit subsidy proposal, hearing, 12293
medical assistance, participation under title 19 of social security act, report, 13645
medical care under 1965 social security amendments, enable to participate in benefits, hearings 10645
metropolitan area, community planning for nursing, source book, 18158
minimum wage law, amend—
law, 398
report, 4504
motor vehicle operators' permits, issuance for less than 3 years, report, 12381
motor vehicle or trailer registration, facilitate addition of name of spouse of owner—
law, 12178
reports, 12382, 13640
motor vehicle safety responsibility act, amend, reports, 13644, 17623
motor vehicles, title certificate applications, eliminate oath requirement, report, 12383
National Advisory Commission on Rural Poverty, hearings, 17127
National Capital transportation act of 1965, amend, hearings, 15021
National Visitor Center, study commission, create—
law, 494
report, 631
National Visitors Center Study Commission report, 16341
National Zoological Park reorganization—
hearing, 736
report 2021
nonprofit corporation act, amend corporate charter of Georgetown University to conform to—
law, 370
report, 4501
nonresident tuition act, administration, Board of Education, District of Columbia Government, GAO review, 4676

INDEX 1967

District of Columbia—Continued
 optometry practice, regulate, hearings, 16319
 parking facilities, establishment, report, 13802
 Pennsylvania Avenue, administration as historic site, report, 9266
 physical abuse of children, etc., mandatory reporting by physicians, etc., law, 479
 pistol registration, require, hearings, 10644
 plant regulatory officials, 5618
 podiatry, regulating practice, amend act, report, 7691
 police and firemen retirement benefits, equalize for totally disabled, report, 9129
 police and firemen's retirement and disability act, amend to make applicable to widows of retired members, report, 10558
 police and firemen's salary act of 1958, amend, law, 514
 police canine corps, expand, report, 9127
 Police Department band, include members of Fire Department, etc., report, 7687
 Police Department, recruitment and retention problems, etc., hearings, 9152
 Police Department reorganization, Congress to review report of D.C. Crime Commission, final report, 6011
 prisoners, work release program, authorize—
 hearing, 727
 law, 607
 public crematorium, establishment, amend act, report, 16379
 public school food services act, amend, reports, 2087, 16381
 public schools, custodial and engineering staffing, guidelines needed, GAO report, 12587
 publications, list, 2802
 rental property used for residential purposes, require publication of owner's names, hearings, 2113
 report of 1965-66 compensatory education programs under title I, Public law 10, 7890
 representation in Congress, amend U.S. Constitution, hearings, 15044
 revenues, providing additional, report, 672
 sales tax, amend, report, 9087
 school board, election—
 hearings, 15022
 message from the President, 16156
 report, 14949
 school census, amend act, report, 16378
 schoolchildren, transportation at reduced fare, increase age, report, 16380
 Shrine convention, 1967, promulgate regulations, report, 2088
 square 732, authorization for use as recreation area, law 412
 statute of limitations, amend relative to civil actions arising from unsafe property improvements—
 hearing, 17596
 report, 16295
 teachers leave act of 1949, amend relative to sick leave, report, 14991
 teachers retirement act, amend, report, 14992
 teachers' salary act of 1955, amend, law, 514
 telephone calls, obscene or harassing, criminal penalties for—
 hearing, 10826
 reports 4582, 9128, 9294
 traffic act, amend to require report of motor vehicle collisions to police, report, 7689
 traffic act of 1925, as amended, amend, reports, 12381, 12383, 17623

District of Columbia—Continued
 transit compact, approval—
 hearing, 2132
 law, 478
 report, 654
 trust funds, legal investments, list, 6157, 15201
 unemployment compensation act, amend to exempt public international organizations, report, 16293
 uniform gifts to minors act, permitting deposit in savings and loan associations, etc., report, 13639
 victimization and attitudes toward law enforcement, field survey, 13058
 voluntary admission of patients to institution providing care, education, and treatment of mentally retarded persons, report, 7703
 war on poverty, examination, hearings, 12420
 Washington Channel waterfront priority holders, amend act, reports, 895, 7700
see also Capital of United States.
 District of Columbia Committee, House:
 calendar, 8473
 committee print, 4529
 hearings, 727, 6033, 9152, 10644-646, 12293-294, 13702-703, 15021-22, 16318-320, 17596-598
 Investigations and studies organization, etc., of D.C. Government, authorization, reports, 6017, 7723
 reports, 2026, 4501, 6011, 7646, 7686-89, 7691, 7700-1, 7703, 9086-87, 9127-30, 9132, 10558-559, 13631, 13638-641, 13644-646, 14949, 14991-995, 14999, 16227, 16258, 16260, 16292-296
 District of Columbia Committee, Senate:
 calendar, 3493
 hearings, 949, 2113, 10829, 13857-858, 16405-407
 reports, 879, 882, 893, 895, 2087-88, 2102, 15101, 12380-385, 13802, 13824, 16378-384, 17623
 District of Columbia Court of Appeals, Judges, increase number, report, 13638
 District of Columbia Crime Commission, *see* President's Commission on Crime in District of Columbia.
 Dittman, Laura, children in day care, with focus on health, 7513
 Dittmer, Karl, driver, automotive magazine of Air Force, 11949
 Diuretics, *see* Urine.
 Divers:
 USSR manual for rescue divers, 6503
 visual resolution underwater, 14317
 Dividends, *see* Corporations—Life insurance.
 Dividers, *see* Voltage dividers.
 Diving:
 Project Sealab, 45-day undersea saturation dive, report, 11669
 scuba, biologic and physical aspects, 11953
 scuba diving and underwater sports, USSR study, 6490
 scuba diving in USSR, 15420
 Diving medicine, *see* Medicine.
 Division of Hospitals, PHS, annual statistical summary, diagnostic and demographic data, 8629
 Division of International Affairs, HUD, available publications on housing, building and planning, 8205
 Divorce:
 statistics analysis, 17172
 vital statistics of U.S., 10070
 Dixon, Grayson V., automatically controlled air spring suspension system for vibration testing, 9881
 Dixon, Sidney C., comparison of panel flutter results from approximate aerodynamic theory with results from exact inviscid theory and experiment, 1480
 Dixon Entrance to Cape Spencer, coast pilot, supplement, 7554

Dizziness and vertigo in aviators, 17359
 DMS, *see* Defense Materials System.
 DMSO, *see* Dimethyl sulfoxide.
 DNA, *see* Desoxyribonucleic acid.
 Do you know your economic ABC's? (series), 13454
 Do you know up to Air Force ROTC? 15885
 Dobrowolski, Andrzej, analysis of nonconstant area combustion and mixing in ramjet and rocket-ramjet hybrid engines, 1478
 Docking (spacecraft), *see* Spacecraft.
 Docks:
 boat landing, building plan, 39
 data, Port of New York, N.Y. and N.J., 4736
 floating, Federal item identification guides for supply cataloging, supplements, 3293
 Port of New York, N.Y. and N.J., facilities maps, 9421
 Dokter, Leroy, pulverizing lignite in ball mill, 15476
 Doctors, *see* Physicians.
 Doctors' degrees, *see* Degrees (colleges, universities, etc.).
 Doctrine for riverine operations, Marine Corps, 8331
 Documentation:
 dissemination of scientific information and documentation in Rumania described, 14222
 message retrieval systems, manual and automatic, laboratory evaluation, 4166
 Documents, *see* Congressional documents—Government publications—Records—also subject of documents.
 Documents Office, *see* Public Documents Division.
 Dod, Karl C., Engineers Corps technical services, war against Japan, 5096
 DOD, *see* Defense Department.
 DOD pamphlets, 7374-75, 8873-74, 10247-250, 11974-980, 13279-287, 15905-923, 17367-370
 Dodd, Thomas J.:
 investigation—
 hearings, 9331
 report, 9296
 Doder, Duske, relief, 351
 Dodge, F. C. W., mineral resources of Desolation primitive area of Sierra Nevada, Calif., 11169
 Dodge, J. Robert, housing in Ethiopia, 6417
 Dodge, R. N., fore-and-aft stiffness characteristics of pneumatic tires, 16919
 Doerr, Robert M., reaction of tungsten-cobalt alloys with oxygen at 1,000° and 1,100°K, 14352
 Dogs:
 acute hypoxia, regional lactic acid concentration, 1739
 anesthetized—
 and unanesthetized, heart rate response to noise and near-vacuum decompression, 4180
 cardiovascular responses during repeated decompressions to near-vacuum, 78
 effect of hydrazine on liver glycogen, arterial glucose, lactate, pyruvate and acid-base balance, 7359
 breathing 1 and 3 atmospheres of oxygen, effect on tissue oxygenation during hemorrhage, 15895
 central nervous system, rapid decompression to 1 mm. Hg, residual pathologic changes, 1743
 conditional reflex activities of dogs poisoned with sarin and soman and then treated with remikol-5, Bulgarian study, 6563
 District of Columbia canine corps, expand, report, 9127
 plasma, effect of oxygen, 5712

Dogs—Continued
 transmitter of hemophilic blood, anticoagulant effect, clotting prolonged, 10244
 Doing business with Federal Government, 1104
 Dole Company, President's E award for export excellence (remarks), 7295
 Dollchopodidae, *see* Flies.
 Dollars for medical research, 1947-66, sources and performers, 10062
 Dolph, R. E., insect outbreaks in Oregon and Washington, 17797
 Dolphins, non-Soviet research, USSR review, 2463
 Domain structure, magnetic domain switching, simplified technique demonstrates, 17964
 Dominguez, Ramiro de la Riva, relief, 15070, 16224, 17526
 Dominica, *see* Windward Islands.
 Dominican Republic:
 Army area handbook, 11990
 background notes, 13133
 capsule facts for Armed Forces, 15905
 foreign trade regulations, 4442
 special study mission, report, 10568
 weather stations, cooperative meteorological program, continuation, agreement, 8751
 Dominick, Allen E., conveying mineral interests to, 334
 Don Juan, Max Frisch's play, Moscow production criticized, 6541
 Donahue, Thomas R., nomination, hearing, 7823
 Donald W. Douglas Laboratories, dedication (remarks), 7438
 Donaldson, Eric C., modifications of pendant drop interfacial tensiometer, 6640
 Donnelly, Warren H., science, technology, and public policy during 89th Congress, 13716
 Don't guess! Ask your security supervisor, poster, 13927
 Door latches, *see* Latches.
 Doors:
 combination double door high-vacuum valve provides access to vacuum chamber, 9525G
 controls for automotive vehicles, Federal standard, 6326
 heavy hinged, simple motor drive system operates, 8404
 steel doors and frames, standard stock light-duty 1½ and 1¾-inch thick flush-type interior, standard of trade, 11587
 Dope (coating materials):
 semiconductor devices, fabrication by neutron transmutation, 12010
 Doppler coefficients, *see* Coefficients.
 Doppler effects:
 ambiguity function independent of assumptions about bandwidth and carrier frequency, 8598
 laser Doppler flowmeter measures gas velocity, 6847
 Doppler method in navigational use of artificial earth satellites, USSR, 11280
 Doppler radar:
 automatic frequency control systems responding to Doppler frequency shift, synthesis, USSR study, 16742
 probing balloon motion, 16532
 Dorman, Keith W., forest tree improvement research in South and Southeast, 9542
 Dorn, Georgette M., Latin America, annotated bibliography of paperback books, 12779
 Dosh, R. N. Bert, Lock, *see* R. N. Bert Dosh Lock.
 Dosimeters:
 calibration and use, USSR studies, 6565
 high intensity radiation dosimetry measured with SEMIRAD, 4219A
 thermoluminescent systems compared with film badges, 8599

INDEX 1967

Dosimetry:

- energy dependence of free radical production in alanine, 1744
- gamma irradiation dosages for disinfection of fruit and vegetables, 5794
- high intensity radiation, measured with SEMIRAD (secondary-electron mixed-radiation dosimeters), 4219A
- luminescence dosimetry, international conference on, proceedings, 10297
- thermoluminescent, observations (paper), 17392
- Doten, George W., use of teams in image interpretation, information exchange, confidence, and resolving disagreements, 5752
- Dough, frozen, market potentials, 7277
- Dougherty, H. T., vector diffraction theory, pt. 1, vector integral equation, 7935
- Dougherty, Jack B., steps to effective sanitation in smoked-fish plants, 9514
- Douglas, Charlotte A., infant and perinatal mortality in Scotland, 5466
- Douglas, Geneva S., radioassay procedures for environmental samples, 11725
- Douglas Jr., *see* Fir.
- Douglass, Bernard S., development of plantation of high quality true fir Christmas trees, 2292
- Douglass, Frederick, 25-cent regular postage stamp (poster), 5387
- Douglass, Raymond C., Permian tethyan fusulinids from California, 16699
- Doumani, George A., Antarctic bibliography, 6621
- Doves, *see* Mourning doves—Pigeons.
- Dow, Donaldson A., test of large-diameter ring-stiffened cylinder subjected to hydrostatic pressure, 1479
- Downdraft (periodical), 12634
- Downs, Eldon W., Air University review, 3015
- Downwash (aircraft):
 - wake momentum surveys of turbulent boundary-layer skin friction on 5 swept wings, measurement, 2725
- Dowtherm A heat transfer tests, final report, 5762
- Dowtherm A Rankine cycle technology, final report, 5761
- Doyle, D. V., properties of southern pine in relation to strength grading of dimension lumber, 2327
- Draft (military), *see* Conscription.
- Drafting, technician, examination announcement, 1910
- Drafting instruments, modifying, to minimize smearing concept, 15547
- Draftsmen:
 - engineering draftsman, examination announcement, 13445
 - illustrator draftsman—
 - 1 & C, Navy training course, 11656
 - 3 & 2, Navy training course, 13026
 - office draftsman, examination announcement, 13445
 - pay, national survey, 2507
- Drag (aerodynamics):
 - aerodynamic investigation of high-drag entry shapes at Mach 15.4, 16986
 - atmospheric probe stability and drag characteristics, 9894
 - coefficients and local flow of family of blunt bodies, 18056
 - coefficients of microscopic spheres in free-molecule flow, 11407
 - high-drag bodies, longitudinal aerodynamic characteristics, 9892
 - hypersonic viscous drag on cones in rarefied flow, 12949
 - measurements, in stream with sinusoidally fluctuating velocity in longitudinal direction, 5749
 - viscous effect on performance of coaxial plasma gun, calculation, 5267

Drag (hydrodynamics):

- injection of drag-reducing fluid into turbulent pipe flow of Newtonian fluid, 14398
- reduction by dilute polymer solutions in turbulent flow, 14592
- Draggin' Lady (vessel):
 - documentation with coastwise privileges, report, 10762
- Dredheads (dredges), *see* Dredges.
- Dragovich, Alexander:
 - Gymnodium breve on west coast of Florida, 8039
- oceanographic atlas for Tampa Bay, Fla. and adjacent waters of Gulf of Mexico, 12545
- Drainage:
 - areas other than airfields, emergency construction, Army technical manual, 111
 - publications, price list, 8623
 - structures for airfields and heliports, emergency construction, 110
 - surface, design for airfields and heliports, arctic and subarctic emergency construction, 7395
 - surface facilities for airfields and heliports, emergency construction, 4214
 - wetland road crossings, problems, 14097
- see also* Mine drainage.
- Drake, Avery A., Jr., Martinsburg formation, middle and upper Ordovician in Delaware Valley, Pa.—N.J., 6395
- Drama:
 - and works prepared for oral delivery, catalog of copyright entries, 969, 13904, 17683
 - Moscow production of Max Frisch's Don Juan criticized, 6541
 - voice of the silent stage, 4723
- Drawings:
 - manufacturers part and drawing numbering systems—
 - Defense Department, 2146, 7847
 - change, 10886
 - micrometer U-tube manometers, 17040
 - naval design manual, 17063
 - changes, 2764
 - scientific and technical, catalog of copyright entries, 968, 2141, 6137, 17082
- Dredges, hopper dredge dredges, model study, hydraulic model investigation, 6211
- Dredging:
 - coding and keypunching geological information form for core grab, and dredge samples, instructions, manual, 6997
 - Engineers Corps policies and procedures relating to cost estimates, bids, and contract awards, GAO review, 14154
 - hopper dredge dredges, model study, hydraulic model investigation, 6211
 - plain and rifled discharge pipe, comparison tests, 7930
- Drennan, Henry T., library manpower, occupational characteristics of public and school librarians, 4713
- Dresses:
 - changing hem, 7283
 - women's and misses, industry wage survey, 6613
- Drewes, Harald, geology of Connors Pass quadrangle, Schell Creek range, east-central Nevada, 16694
- Dried foods, *see* names or classes of foods dried.
- Dried milk, *see* Milk.
- Drill (military), *see* Military drill.
- Drill cores, diamond, gold distribution from Homestake Mine, Lead, S. Dak., 6679
- Drill press, safe practices, 9726
- Drilling, gas-petroleum in sea regions, USSR study, 9640
- see also* Core drilling—Diamond drilling.

Drills (tools):
hole saw attachment has zero force reaction, 6767

Drinking water, *see* Water.

Driscoll, Norman R., effects of simple stability augmentation system on performance of non-instrument-qualified light-aircraft pilots during instrument flight, 11519

Driscoll, Timothy J., Jr., thermoelectric properties of yttrium-group 5 and 6 binary and ternary compounds, 16867.

Drive (electromechanical):

low speed, long term tracking electric drive system has zero backlash, 14426
motion drive system is accurately controlled in 1-micron range, 9825F

Drive (power transmission), *see* Power transmission.

Drivers, *see* Automobile drivers—Motor vehicle operators—Motortruck drivers.

Drobot, Jan, relief, 597, 13610, 17501

Dropouts, *see* School attendance.

Drops:

improved method of determining spread factor of water droplets for pesticide spray coverage, 10149
mercury droplet parameters including effects of gravity, photographic study, 1509

see also Clouds.

Drosophila, *see* Flies.

Drowning, drownproofing can save your life, 1718

DRS, *see* Research Services Division, NIH.

Drug Abuse Control Bureau:

criminal investigator, career opportunities, 11095
fact sheets, 12553-560, 14072-73

review of activities, etc., 15270

Drug addiction, *see* Narcotic habit.

Drugs:

abuse and use, medicated man (address), 14075
animal drug amendments of 1967, hearing, 17605

antipsychotic, antianxiety, and antidepressant drugs, uses in psychiatry, etc., 2962

code of Federal regulations, 6276-79
companies, invasions of privacy, hearings, 4648

companies, physician ownership, hearings, print additional copies, reports, 916, 2030

controlled drugs, fact sheet, 12559
Coronary Drug Project, 15678

coverage of expenses under medical insurance benefits, Senate amendments, summary, 4567

Czechoslovak Ministry of Health directives on control of pharmaceuticals, 12685
drug abuse control, 1965 amendments, fact sheet, 12553

drug abuse, outline of information, 12564
drug abuser, fact sheet, 12555

drug industry, small business problems, hearings, 12317

drugs of abuse, identification, reaction, etc., 15271

drugs vs. cancer, 15708

Food, drug, and cosmetic act—

amend, hearing, 17605

amended, text, 1093

enforcement and compliance, FDA report, monthly, 3268
notices of judgment, 3643

requirements guide for foreign manufacturers, etc., 17790

illegal traffic in dangerous drugs, fact sheet, 12554

import detentions, report, 3820

mailing of unsolicited sample drug products, etc., prohibit, hearing, 10668
medical restraint of trade act, hearings, 17661

Drugs—Continued

pharmaceutical development in USSR, Bulgaria, and Rumania, 15391

pharmaceutical industry competition, problems, present status, hearings, 16436, 17677

pharmaceutical preparations, except biologicals, current industrial reports, 8943, 16001

pharmaceutical preparations which may be dispensed by pharmacies without physician's prescription, Czechoslovakian list, 12673

pharmaceutical products manufacturing machinery, industrial plant equipment handbook, 7851

prescribed—

and nonprescribed medicines, 1964-65, type and use in U.S., 18158
old-age assistance recipients in Cleveland, Ohio, area, inquiry into alleged practices, GAO report, 8150

welfare recipients in California, controlling payment, GAO report, 2354

prescription programs, digest, 8628
psychopharmacologic and psychotomimetic recent research in Czechoslovakia, 16774

purchase, pricing methods used by various States of prescribed drugs under GAO review, federally aided public assistance programs, Welfare Administration, 9556

research directions in fields of drug conditioning, 1222

Russian index, 8534A

R legend, FDA manual for pharmacists, 6360

safety, etc., FDA's life protection series, 12562

safety, hearings, 2047
print additional copies, report, 644

use medicated feeds carefully and wisely, potentially harmful to humans (poster), 16639

see also Narcotics—also names of drugs.

Drums (containers):

steel shipping, current industrial reports, 3169

Drunkennes:

control in District of Columbia, hearings, 13702

offenses, etc., annotations, consultants' papers and related materials, task force report, President's Commission on Law Enforcement and Administration of Justice, 13066

Dry cleaners and dyers, dry cleaning establishments under Fair labor standards act, as amended, 1664

Dry cleaning:

business, starting and managing, 5497

service, industry wage survey, 14298

Dry farming, upper Snake River area, moisture conservation for wheat production, 4088

errata, 11923

Dry Mountain quadrangle, Mont., igneous geology, 2358

Dry-packed beds for removal of strong-acid gases from recycled atmospheres, 5350

Drying:

equipment, Federal item identification guides for supply cataloging, supplements, 3288

making basements dry, general information, 1698

trays, malathion-treated, use to protect raisins from insects during drying and storage, 15859

see also names of substances dried.

DSA, *see* Defense Supply Agency.

DuBridge, R.A., reactor control systems based on counting and Campbell techniques, 7422

Dubuque, Iowa, population, special census, 8952

INDEX 1967

Dubuque County, Iowa, geology, Pitosi quadrangle, 6385
 Ducasse, Enrique R., relief, 536
 Duck stamp data, information for collectors, 11075
 Ducks, sea, hunting, possession, transportation, importation in Alaska 1967-68, Federal regulations governing, 14061
see also Mallards.
 Duckworth, Nancy, what label means on luncheon meats you buy, 966
 Duckworth, W. Donald:
 neotropical microlepidoptera—
 genus *Lethata*, 8549
 genus *Loxotoma*, 6969
 genus *Thioscellis*, 14543
 systematic position of 2 taxa erroneously placed, etc., 5304
 Ducted fans, V/STOL model with 4 tilting ducted fans arranged in dual tandem configuration logarithmic aerodynamic characteristics in ground effect, 18045
 Ductile mandrel and parting compound facilitate tube drawing, 5156
 Ductility:
 electrolytic process for producing ductile vanadium, 12825
 improved, for high strength tungsten alloy, 16969
 Ducts, liquid oxygen ducting cleaned by falling film, method, 16947
 Duda, John R., predicted oil recovery by waterflood and gas drive, Bradford Third and Sartwell sands, Sartwell oilfield, McKean County, Pa., 11373
 Dudley, Richard F., applicator for precision placement of chemicals in soil, 1673
 Duff, John E., probe for accurate determination of moisture content of wood products in use, 2298
 Duffy, Leonard G., relief, 320
 Dugan, John V., Jr., volume ion production costs in tenuous plasmas, 15577
 Duggan, R. E.:
 pesticide analytical manual, 16640
 pesticides, report on residues in food, 15274
 Dugout Project, *see* Project Dugout (Plowshare program).
 Duk Hee Lee, *see* Lee Duk Hee.
 Duk Hwa Hwang, *see* Hwang Duk Hwa.
 Duke, Noriko S., relief, 9247
 Dumas, y Aleocer, Julio F., and wife, relief, 9245
 Dummies, electronic, for acoustical testing, 16946
 Dumois, Juan A., relief, 295, 588
 Dunavant, James C., effect of roughness on heat transfer to hemisphere cylinders, 8492
 Dunes:
 Florida sandhills, loss of topsoil slows slash pine seedling growth, 14119
 stabilization with vegetation on Outer Banks, N.C., 16523
 Dunham, Denis F., trial use of foam spray-dried whole milk in selected types of institutions, 13946
 Dunham, Ralph E., teaching faculty in universities and 4-year colleges, 1963 spring, 9413
 Dunlop, Donald V., climates of States, New Jersey, 9426
 Dunn, S. T., thermal radiation property measurement techniques, 9945
 Dunnigan, Keith D., education and training laws, 6122
 Duplicating machines, *see* Copying processes.
 Dupree, Harry K.:
 response of channel catfish fingerlings to different levels of nutrients, 8042
 vitamins essential for growth of channel catfish, 8042
 Dürer and his time, 10079
 Durfee, Robert L., boiling heat transfer with electrical field (EHD), 13334

Durling, Richard J., catalogue of 16th century printed books in National Library of Medicine, 15598
 Dust, machine for application of dust to cut seed potatoes, 7241
 Dusting apparatus, dusters, general information, 1691
 Dusts and dusting, inert dusts, evaluation as protectant against insect attack on wheat in small bins, 8835
 Dutch elm disease, death of a giant, Dutch elm disease still takes its toll, picture story, 15872
 Dutcher, L. C., surface water and related climate features of Sâhil Sûsah area, Tunisia, 11189
 Duties, *see* Tariff.—*also* names or classes of articles imported.
 Dutton, James J., power reactor technology, quarterly technical progress review, 3697
 Duvall, Vinson L., fertilization uneconomic for forage improvement in Louisiana pine plantations, 14117
 Duvall, Wilbur L., nonuniform radial loads applied to boundary of circular hole in infinite plate, 17914
 Dwarfmistletoe, *see* Mistletoe.
 Dwellings, *see* Housing.
 Dwight, Ill., motor carrier accident, 16872
 Dyeing machinery, wool dyeing and finishing plants, industry wage survey, 15446
 Dyes and dyeing:
 dye binding method for evaluating proteins in milk,
 dyeing, patent classification definitions, 5369
 marking fish, 4812
 synthetic dyes, production and sales, 13160
 textile dyeing and finishing, winter 1965-66, industry wage survey, 2501
 DYNAGYRO, mechanical stability augmentation for helicopters, 13307
 Dynamic programming, *see* Programming (mathematics).
 Dynamic stability, *see* Stability of aircraft.
 Dynamics:
 and origin of ocean waves, USSR study, 12674
 characteristics—
 electron bombardment, ion thrusters, 8033
 square plates by passive analog simulation, 5168
 variable-mass slender elastic body under high accelerations, 5188
 computer-aided teaching of dynamic system behavior, 62
 data characterized by time-varying frequency spectrum, method of analyzing, 16996
 deployment dynamics of spinning spacecraft, simulation, 14471
 elastic space stations, dynamic response, study, 15523
 flight behavior of ballasted sphere at Mach numbers 0.4 to 14.5, 18029
 human operator response to step transitions in controlled element dynamics, 5171
 interface of cryogenic liquid experiment in orbit, 2608
 land landing couch dynamics computer program, 15530
 landing loads on vehicle with tricycle landing gear, theoretical analysis, 14472
 lateral-directional, of variable-stability transport aircraft, influence of response feedback loops, 11516
 model investigation—
 touchdown, stability of lunar-landing vehicles, 18042
 water pressures and accelerations during landings of Apollo spacecraft, 16970
 response of rotor blades of tandem-rotor helicopter, predicting, 13310

Dynamics—Continued

- slush study in near zero gravity, vehicle and spacecraft description, 11530
- space vehicle flight control systems, analysis and design—
 - component dynamics, 12876
 - short period dynamics, 12871
- stability characteristics of Apollo command module, 8500
- stress testing, biomedical monitoring—
 - Flack test, 7360
 - instrumentation and normal values, 7343
 - Levy hypoxia test, 7344
 - maximum exercise tolerance, ergometer, 7361
 - tilt table orthostatic tolerance test, 7362
- structural, of solid propellant rocket motors, 2611
- supercritical shafts on flexible supports, analysis by using transmission line analogy, 1773
- systems, algebraic methods, 2600
- 2-phase liquid-gas weightless medium with aid of surface effects, control, 11562
- water rejection from hydrogen-oxygen fuel cell to hydrogen stream, 18031
- see also Aerodynamics—Magnetohydrodynamics.
- Dynamics of academic science, etc., 14560
- Dynamometers :
 - calibration of 2 bicycle ergometers used by health examination survey, 7096
 - maximum exercise tolerance, ergometer, biomedical monitoring during dynamic stress testing, 7361
- Dyrness, C.T., soil surface conditions following skyline logging, 14104
- Dysbarism, altitude, treatment with oxygen under pressure, 7367
- Dysinger, Dale W., motivational factors affecting Army research and development personnel, 4228

E

- E.R.S., see Economic Research Service.
- E.S.D., see Electronic Systems Division.
- Eagan, Patrick E., relief of estate, 13731
- Eagle (periodical), 3216
- Eagles, build, symbol of our Nation, announcement and order form, 1565
- Eakins, Thomas, American painting, 5-cent commemorative postage stamp (poster), 17113
- Ear :
 - incidence of diseases in 400 space and test pilot candidates, 14781
 - unilateral caloric stimulation of labyrinth, auto- and cross-correlation of EEG following, 71
- Early skeletons from Tranquillity, Calif., 1531
- Earnings, see Salaries—Wages.
- Earth :
 - crust, composition, geochemistry data, 12606
 - earth-ionosphere waveguide channel, propagation of long and superlong radio waves, USSR excerpt, 17873
 - greatest storm on earth, hurricane, 17738
 - horizon radiance profile, analytical techniques which define location of reference horizons, 9802
 - interior—
 - elementary description, 1114
 - secrets, USSR study, errata, 2426
 - internal structure and physics, 9920
 - ionosphere cavity, thinshell model resonances, 2225
 - lunar intersection of tail of earth's magnetosphere, indications USSR study, 1284

Earth—Continued

- magnetic field—
 - analysis, 16583
 - influence on diurnal variation of faF2 (Fourier analysis), 8512
- materials—
 - hydrologic properties (series), 16701
 - specific yields, compilation, 16701
 - photograph taken by lunar orbiter I, mission summary, 5429
 - photographs from Gemini missions, 12880
 - regularization, USSR study, 4951
 - vibrations from nuclear explosion in salt dome, 8911
- see also Geodesy—Terrestrial magnetism.
- Earth satellites, see Satellites.
- Earth sciences, see Science.
- Earth Sciences Institute, see Institute for Earth Sciences.
- Earthquakes :
 - Alaska, 1964—
 - anchorage area, effects on hydrology, 1123
 - Copper River basin area, effects, 2371
 - effects on communities (series), 11175-176
 - effects on glaciers (series), 11178
 - effects on hydrologic regimen (series), 1122-23, 11177-178
 - effects on transportation, communications, and utilities (series), 12609
 - Eklutna hydroelectric project, Anchorage, Alaska, effects, 6402
 - field investigations and reconstruction effort, 8169
 - horizontal and vertical crustal movement, Prince William Sound, Alaska, 5940
 - hydrologic effects outside Alaska, 11177
 - its geologic setting and effects, summary description, 8169
 - Kodiak and nearby islands, effects, 1121, 11176
 - Martin-Bering Rivers area, geomorphic effects, 2370
 - Prince William Sound, aftershocks research studies, seismology and marine geology, 12117
 - reconstruction, semiannual reports, 9058, 16159
 - regional effects (series), 1121, 2370-71
 - Seward, Alaska, effects, 11175
 - south-central, effect on air and water transport, communications, and utilities systems, 12609
 - south-central, effects on hydrology, 1122
 - Parkfield, Calif., June 27, 1966, seismological and engineering report, 1934
 - Parkfield-Chollame, Calif., June-Aug. 1966, surface geologic effects, water-resources aspects, and preliminary seismic data, 9574
 - Truckee, Calif., Sept. 12, 1966, effects, 9565
 - United States, 12121
 - USSR, 1255
 - see also Seismograms.
 - Earthwork and structures :
 - floodwater retarding structures, hydrologic performance during Colorado storms of June 16-17, 1965, report, 14651
 - winter construction practices, concrete and asphalt, survey, 98
 - East (Far East) :
 - agricultural data book, 10926
 - agricultural situation—
 - midyear review, 16492
 - 1966 review and 1967 outlook, 12455
 - Far Eastern series, 1627, 2880, 11825, 14674
 - manpower utilization at military installations, report, 9133
 - market profiles, 13463

INDEX 1967

East (Far East)—Continued
 mineral industry, regional review, minerals yearbook chapter, 11367
 U.S. policy as stated by President Johnson, 2880
 East (Middle East) :
 accessions list, Library of Congress American Libraries Book Procurement Center, Cairo, 3554
 events, select chronology 1946-67, and background documents, 13862
 Near and Middle Eastern series, 14680
 oil problems, USSR commentary, 2441
 USSR charges blackmail in oil crisis, 15397
 war or peace, study mission report, 10837
 East (Near East) :
 arms sales to Near East, hearings, 15155
 market profiles, 13456
 mineral industry, regional review, minerals yearbook chapter, 6672
 Near and Middle Eastern series, 14680
 special study mission, report, 9104
 translations, 3962
 United States policy in crisis, 14680
 East (U.S.) :
 feldspar, resources and marketing, 8339
 fluorspar, Eastern States production, consumption, etc., 16853
 fresh fruit and vegetable unloads in eastern cities, by commodities, States, etc., 7830
 log cabins, rustic work and unseasoned wood, protecting from injurious insects, 5627
 milk consumption and food service patterns in selected institutions, 11935
 precipitation, effects of tropical cyclone rainfall, 15230
 East Africa, *see* Africa.
 East Asia, *see* Asia.
 East Europe, *see* Europe.
 East Germany, *see* Germany.
 East Northumberland Canyon, Nye County, Nev., bedded barite, 16689
 East of the Elbe, Warsaw, Moscow, Belgrade, and Prague study mission report, 6104
 East Potomac Park, bridge with visitor facilities, construct, hearing, 750
 East St. Louis, Ill., air pollution study, 5438-42, 11739
 East Siberian Sea, turbidimetric observations, 9988
 East South Central States, *see* Central States.
 East-West trade, *see* Commerce.
 Eastern Air Lines, Inc., accident, 4369
 Eastern Cherokee Indians, *see* Cherokee Indians.
 Eastern Europe, *see* Europe.
 Eastern Hemisphere, *see* Hemisphere, Eastern.
 Eastern States, *see* East (U.S.).
 Eastern Utilization Research and Development Division, publications and patents, 7254, 15831
 Easton, Pa., area wage survey, 11324
 Eastport, Maine to Montauk, N.Y., coastal warning facilities chart, 14719
 Eastport to Cape Cod, coast pilot, supplement, 5942
 Eat good breakfast to start good day, 14745
 Eaton Yale & Towne, Inc., adjustment assistance case pertaining to certain workers, excerpts from Tariff Commission report to Automotive Agreement Adjustment Assistance Board, 8767, 10115, 14705
 Eau Galle River, reservoir, outlet structure, hydraulic model investigation, 10960
 Eavesdropping, right of privacy act of 1967, hearings, 12306
 Eberhard, John P., address, Oct. 28, 1966, 2735
 Ebert, P. J., energy dependence of free radical production alanine, 1744
 EBS, *see* Warning systems.
 ECG, *see* Electrocardiograms.
 Echenique, Jorge G., relief, 549

Echinoderms, *see* Sea cucumbers.
 Echinoids, *see* Sea urchins.
 Echo :
 magnetostatic, study of yttrium iron garnet rods reveals new mode, 12889
 radar, movement and predictability, 6220
 errata, 10964
 Ecnols, Hamp W., controlling Texas leaf-cutting ants with mirex, 2325
 Echols, William H., aerobic bacteria culture apparatus employing new foambraker, 10007
 Eckel, Edwin B., effects of earthquake of Mar. 27, 1964, on air and water transport, communications, and utilities systems in south-central Alaska, 12609
 Eckerson, A. B., 1966 supplement to dictionary of occupational titles, 6205
 Eckhoff, Mark G., Foreign Service post records in National Archives, list, 14511
 Eckler, A. Ross :
 papers—
 Oct. 28, 1966, 1889
 Mar. 29, 1967, 10353
 Eclipses solar, coronal photographs, isophotes, and flash spectrum, 11551
 Ecology :
 human, south coastal Guatemala, 9954
 hydrology and ecology, Pine Barrens, New Jersey (series), 6408
 Iguanid lizard, 15602
 trace constituents of closed ecologic system, delineation program, 7369
 Economic assistance, *see* Foreign aid.
 Economic concentration, hearings, 6116, 12415
 Economic conditions :
 airport influence on community economy, 14786
 assessment (remarks), 1656
 Commerce Department, agency of business, promotes economic growth guidebook, 5963
 current economic happenings (remarks), 17265
 current outlook for U.S. economy (remarks), 13468
 current problems and prospects (remarks), 5573
 domestic economy, problems and forecasts (address), 17473
 economic data for less developed countries, 4924
 economic development and college enrollment (address), 16477
 economic effects of seasonality in OASDHI tax payments, 17203
 economic environment and urban development (paper), 13929
 economic improvement and growth (remarks), 7213
 economic indicators, 3227
 supplement, 13547
 economy in 1966, price developments, 14304
 effects of marketing (remarks), 242, 1960
 facts about our economy today and in recent months (remarks), 1653
 governmental controls of economy insure prosperity for all (remarks), 9023
 growth—
 community level, 1599
 input and output factors promoting, 225
 navigation and economic growth, Tennessee River experience, 5567
 U.S. economic growth to 1975, potentials and problems, study 4462
 Idea of amelioration (address), 9011
 impact of—
 Federal procurement, report, 9044
 tax-exempt foundations and charitable trusts, 4562, 10679
 print additional copies, reports, 13653, 13820
 impact of Vietnam (remarks), 10453

Economic conditions—Continued

improvement for low income groups through Government programs (address), 4109
inflation, etc. (address), 17755
influence on children, research programs, studies in progress, 5967
input-output table of social product, USSR study, 1239
livestock-meat economy, simulated inter-regional models, 12453
mainland China in world economy, report, 12389
Negro and Puerto Rican worker, impact of changing economy, statistics, 16831
New York City, some aspects of economic problems, statistics, 15455
1967 outlook and 1968 year-end economic review, 4430
outlook and its policy implications, hearings, 13544
outlook for domestic economy (address), 9012
projections of economic expansion (address), 5948
prospects for 1967 (remarks), 4425
quests for economic stability and equal employment opportunity (remarks), 1065
recent gains and future opportunities (remarks), 7212
report of the President to Congress—
extending date for transmission, law, 9031
hearings, 7589, 9046
report, 7785
responsible conduct and American economy today and 10 years from now (remarks), 2956
rural people in American economy, 983
science & technology and how they are applied to further economic growth, 13454
stable economy, product of shifting policies (remarks), 9496
tax surcharge and national economy (address), 18244
Vietnam spending effect—
hearings, 12187
report, 13814
vitality of national economy (address), 223
what kind of a people are we? can we meet challenges of our Nation? (statement), 18245
see also Negroes—*also* names of countries, States, etc.
Economic development:
Alaska, report, 1939
and Federal system, role of State planning (remarks), 13934
directory of approved projects, 13931
economic development (periodical), 3226
project activity supplement, 6159
economic development, the human and business equation (remarks), 10905
EDA districts, job-creating program, 9380
EDA planning grants, 13932
programs, status and progress—
hearings, 4558
reply of EDA to Subcommittee's interim report, hearing, 12313
report, 7682
regional—
Industrial location as factor, 13936
resource materials, bibliography, 4694
role of cooperatives, ILO recommendation, text, 13554
Soviet engineers reply to questions on role of their specialties, 6561
technology and world trade, symposium proceedings, 8520
underemployment concept, way to measure need in Appalachia, 10922
Upper Great Lakes Regional Commission's new approach, 17281
see also Foreign aid.

Economic Development Administration :

annual report, 2159
building communities with jobs, 13928
business loans, who can borrow, how to apply, 6160, 13930
directory of approved projects, 13931
grants and loans for public works and development facilities, 7869, 13935
job-creating program, district development, 9380
planning grants for economic development, 13932
press releases, 3715
program to help build communities with jobs (address), 17708
programs, progress—
EDA's reply to Subcommittee's interim report, hearing, 12313
report, 7682
research review (periodical), 16478
technical assistance, what it is, how to apply, 7667, 13933
Economic Development Commission, *see* Balanced Economic Development Commission.
Economic indicators, 3227
supplement, historical and descriptive background, 13547
Economic Joint Committee:
act establishing and rules, 10492
committee prints, 1977, 4461-62, 5974, 7588, 7590, 9042-45, 10492, 12189-190, 13545-547, 14918-919, 14921, 16147-148, 17564
fixing representation of majority and minority membership, law, 9032
hearings, 7589, 9046, 10493, 12187-188, 13544, 14917, 14920, 16146, 16149, 17562-563
publications, 80th-89th Congresses, 9043
supplement, 17564
reports, 7785, 12389, 13814
Economic Opportunity Office:
advisory councils, monthly newsletter, 2990
annual report—
departmental edition, 12451
document edition, 12208
appropriations, 1968, supplemental, proposal, 10696
Assistant Directors, nominations of William H. Crook and William P. Kelly, Jr., hearing, 10864
community action programs, 3125, 3842, 7879
traveler/el viajero, newsletter for migrant, etc., farm workers, 7879
economic opportunity act, text as amended, 6120
film guide, 10910
health services, coordinated funding, in projects receiving or eligible for assistance under programs of HEW and OEO, 13938
JCH series, 4688, 7875-76, 9381, 12448
legal services, fact sheet, 4691
legal services in action, 12449
legal services program—
annual report, 4690
monthly account, 3466
news summary of war on poverty, 3632
opportunity loan program in rural America, story in pictures and words, 5674
press releases, 3716
programs, quick facts, 4693, 9384
public affairs handbook, factual information for community action agencies, 13940
the watershed, a new look at war on poverty, 10915
VISTA volunteer (periodical), 4039
war on poverty, examination, hearings, 12420, 13878, 15171, 16427, 17665
Economic orders, Civil Aeronautics Board, 3661

INDEX 1967

Economic policy :

- American industrial development at home and abroad (address), 7561
- are planning and regulation replacing competition in new industrial state? hearing, 16438
- business outlook and national economic policy (remarks), 13453
- Communist China, anti-economism campaign idealizes poverty, USSR historian claims, 6552
- Communist economic reforms, subcommittee report, 12291
- community development district act of 1966, rural public services, etc., reports, 622, 10748
- construction efficiency and economic reform, USSR, 4977
- cost-benefit analysis techniques, bibliography, 1824
- economic activity and monetary policy, postwar review, 11054
- economic and social development of border area, joint commission to study, agreement with Mexico, 7191.
- economic developments 1960-65 (remarks), 2263
- economic opportunity act—
 - amend—
 - hearings, 15024, 15171, 16427
 - law, 17536
 - reports, 14952, 14959, 15125
 - amendments of 1966—
 - law, 498
 - narrative summary, 6164, 9382
 - amendments of 1967—
 - hearings, 17601
 - reports, 16364, 17581
 - text, as amended, 6120, 7874
- economic outlook and its policy implications, hearings, 13544
- economic policies and practices, foreign government restraints on U.S. bank operations abroad, 9045
- economy, prospects and policies (remarks) 17471
- effects of current events (remarks), 1655
- Federal assistance programs, catalog, 12447
- foreign trade's role in U.S. economy (address), 16098
- goals for 1967, growth and balance (remarks), 5950
- Government and 1967 economy (remarks), 7565
- idea of amelioration (address), 9011
- international affairs, cooperative approach (remarks), 10122
- international economic relations and rule of law (remarks), 10120
- intrafactory mechanism for economic reform, USSR study, 4941
- New England, regional economic research and planning, review, 7871
- scientific management and democracy, East Germany, book review, 16759
- USSR—
 - economic reform, improvement of methods of planning and economic stimulation of agricultural production, 4961
 - industrial enterprise change-over to new planning system, methodological instructions, 1169
 - international economic relations, translations, 4024
 - state budget under conditions of implementations of economic reform, 4944
- Yugoslavia, economic reform, science and scientific research work, 6515
- see also Economic development—International cooperation.
- Economic regulations, Civil Aeronautics Board, 3228
- Economic research (Chinese periodical) : translations, 3944

Economic Research Service :

- agricultural economic reports, 983-984
- 2168-70, 6170-72, 7880-82, 9387-89, 10916-917, 12452-453, 13941-942, 16485-487, 17710-711
- appropriations, 1968, hearings, 10629
- economics of agriculture, 1961-65, reports and publications, 13947
- ERS-foreign series, 990-993, 2174, 4700-1, 7886-87, 9393-94, 10924-926, 12455-456, 13949, 16491-494, 17713
- ERS series, 987-989, 2172-73, 4697-99, 6173, 7883-85, 7390-92, 10919-923, 12454, 13944-948, 17712
- foreign agricultural economic reports, 995, 2176, 4702, 15209, 17714
- outdoor recreation research, publications by staff, list, 13945
- periodic reports, list, 10195
- reports, checklist, 3091
- Economic stabilization, see Stabilization.
- Economics :
 - agriculture, reports and publications, 1961-65, Economic Research Service, 13947
 - allocation of resources for handicapped (address), 6179
 - analysis, human resources development programs of Federal Government, questions and outline, papers, 12189
 - computations according to model of expanded reproduction, USSR book, 16734
 - conference on women in Upper Peninsula economy, 2977
 - contribution of Professor Samuelson to field of economic thought, review essay, 6616
 - cotton gin operations, economic aspects in MidSouth, west Texas, and Far West, 12452
 - cybernetics in economy, USSR study, 6537
 - dairy marketing, research publications, bibliography, 13950
 - do you know your economic ABC's?—
 - explanation of input and output factors, etc., 225
 - measurement, pacemaker of American economic growth, 7563
 - science and technology applications, etc., 13454
 - economic education—
 - hearings, 14920
 - remarks, 1954
 - economic efficiency of scientific research, Rumania, 15381
 - economic planning aided by mathematics, USSR study, 1328
 - economic report on manufacture and distribution of automotive tires, 4798
 - economic theory and operational research, USSR book review, 14225
 - health economics, program for research, 10050
 - health series, 10050, 15685
 - instruction, financial assistance guidelines under NDEA, 13956
 - macroeconomic productive function as model of economic growth, USSR study, 9630
 - mainland China in world economy, hearings, 10493
 - marketing research publications, reference, 13944
 - milk and bread prices, report, 4539
 - minerals in world economy, minerals year-book chapter, 15471
 - modern calculation and cybernetics for solving problems, Rumanian studies, 1309
 - national defense education act—
 - institutes for advanced study, summer 1967, handbook for directors, 1003
 - loans to private nonprofit elementary and secondary schools for equipment and materials, 1007

Economics—Continued

- savings bonds, importance in current economic picture (remarks), 18242
- scientific research—
 - discussion, USSR, study, 11274
 - factors contributing to increased effectiveness, USSR study, 1206
- staff economic study, Federal Reserve System Board of Governors, 4790, 6303, 14040
- understanding of the whole developing economic situation, 4792
- USSR—
 - macro-economic production functions as applied to economy, 2469
 - public health, medical men and economists discuss, 2462
 - Vientiane plain, socio-economic study, 6578
 - wage-price stability for healthy economic growth and continued prosperity (remarks), 7214
 - wisdom to know the difference (address), 10471
- Economies in National Government:
 - background material on economy in Government, 9042
 - coordinated program to relieve pressures in financial and credit markets (remarks), 2951
- economy in Government—
 - hearings, 12183
 - subcommittee report, 13545
- NASA BITS, brief ideas, thoughts, suggestions, 16889
- Economies of size in farming, 6172
- Economists:
 - career opportunities with Civil Aeronautics Board, 17448
 - contingency planning for U.S. international monetary policy, statements, 4461
 - evolution of an economist, review essay, 6616
 - USSR, discuss economics of public health, 2462
- Economy approach lighting aids, 10245
- Ecuador:
 - agricultural commodities, agreement, 15765
 - Army area handbook, 10268
 - background notes, 13134
 - capsule facts for Armed Forces, 15915
 - foreign trade regulations, 16101
 - Grammitch genus, 17049
 - lizards, check list and key, 6948
 - mineral industry, minerals yearbook chapter, 11361
- EDA, see Economic Development Administration.
- Eddy, William H.:
 - continuous flotation of fluor spar from calcareous Illinois ore, 14339
 - selective flotation of fluor spar from Illinois, 11382
- Eddy County, N. Mex., geology and hydrology between Lake McMillan and Carlsbad Springs, 8178
- Eddy currents, techniques used in non-destructive testing of metal parts and components, handbooks describing, announcement, 17985
- Eden, W. G., insect damage to corn at harvest time and in farm storage, 14751
- Edgar, Clement B., Jr., mass transfer by sublimation from snow-surface, 4198
- Edge-type connectors evaluated by electrical noise measurement, 11462
- Edisto Island Beach, S.C.:
 - hurricane survey, engineer report—departmental edition, 9418
 - document edition, 9072
- Editing, Atlanta, case study in household sample surveys, 4360

Editors:

- examination announcements, 4411, 10418
- Navy, NAVNEWS 1967 art portfolio, 7025, 17098
- technical, examination announcement, 1931
- Edler, George H., relief, 7657
- Edmisten, N. G., interstate air pollution study, 5438
- EDS, see Environmental Data Service.
- EDTA, see Acetic acid.
- Education:
 - activities in fields of mathematics and chemistry, USSR studies, 1341
- adult—
 - basic, curriculum guide, beginning level, 4708
 - civil defense, personal and family survival teachers manual, 7916, 12470
 - community action, 2163
 - community service and continuing education, newsletter, 3126
 - need to read and write, information leaflet, 10936
 - alcohol, conference proceedings, 8187
 - allied health professions and services, education for, 14622
 - allowances, uniformed services members for dependents' schooling—
 - hearings, 10636
 - reports, 10569, 12245
 - American education (periodical), 3028
 - American population, 14833
 - American, progress, centennial information booklet, 6191
 - and change in scientific age (remarks), 17401
 - Arkansas State Advisory Committee report to Civil Rights Commission, 13434
 - basic tool for achieving national goals (address), 7918
 - bear something away, advice to graduates (address), 996
 - bilingual education act, hearings, 15170
 - bilingual programs, Federal aid to local agencies, hearings, 15170, 16321
 - children in federally affected areas, 1966
 - annual report, 6175
 - children, research programs, studies in progress, 8967
 - city schools, short-changed (address), 16505
 - classification, Library of Congress, 5087
 - community planning, bibliography, 16540
 - consultation and education, service of community mental health center, 1567
 - consumer, pennywise teenagers, 15215
 - cooperative research monograph series, 2186
 - cooperative research to improve nation's schools, report, 16510
 - critical mass in education (address), 2179
 - Defense Department education of dependents overseas, report, 16322
 - Denmark's system and problems, 9397
 - desegregation guidelines, do they go far enough?, 9398
 - directory—
 - higher education, 16498
 - public school systems, 10930
 - State governments, 15211
 - disadvantaged children—
 - bibliography, 4709
 - national conference, 1008
 - summer education, report, 4720
 - economic education, hearings, 14920
 - educating for 21st century manpower needs, tomorrow is now, 17717
 - education and changing technology (address), 998
 - education '67, programs and services, 15212
 - educational attainment, population characteristics, 4349
 - educational dimensions of model cities program (remarks), 11198

INDEX 1967

Education—Continued
 educational institutions, guide for establishing indirect cost rates for HEW research grants, etc., 8189
 educational manual, 7845
 educational media, programs under higher education act of 1965, announcement, 2178
 educational media specialists, national defense education act, institutes for advanced study, summer 1967, handbook for directors, 1003
 educational opportunities for occupational therapy students, 8899
 Educational Opportunity Bank, establishment, panel report, 15663
 educational planning, guide to Federal financial assistance programs, 10631
 educational research, postdoctoral fellowships, 15216
 educational television and radio broadcasting facilities, construction, Federal grants—
 hearings, 10824, 13710
 reports, 10756, 14980, 16245
 enactments, 89th Congress, 2d session, 6121
 engineers in changing society (remarks), 17402
 equal educational opportunities programs, public school districts, 17 southern and border States, status of compliance, 10943
 everybody's business (remarks), 6180
 exchange programs—
 agreement with—
 Australia, 15770
 Brazil, 11837
 Columbia, 14683
 Great Britain, 13149
 Greece, financing, law, 470
 Israel, 11874
 Italy, 11842
 Netherlands, 11861
 Pakistan, financing, 17236
 United Arab Republic, 11870
 international educational and cultural, 1966—
 fall, 4081
 summer, 4080
 opening decades 1946-66, history, accomplishments, etc., 4819
 opportunities, 14678
 overseas activities in support of modern foreign language and area studies, 16506
 exchanges, agreement with Union of Soviet Socialist Republics, 7182
 Federal employees, task force report, 7046
 annex, 10030
 Federal money and recent legislation, 1967 report, 7907
 Federal money for education, programs administered by Education Office, 7908
 Federal surplus personal property, how to acquire, 12621
 Federal surplus real property, how to acquire, 12621
 fertility and educational attainment, Puerto Rico, 15715
 good day at Rough Rock, giving education back to Indians, 9400
 guidance, counseling, and testing personnel in State Department of Education, directories, 6178
 handicapped, adequacy of programs, hearings, 2046, 7741
 handicapped children—
 preparation of professional personnel—
 grant program, 7897
 manual, 16508
 State plan programs, guidelines, 10933
 health, education, and welfare indicators (periodical), 3394
 health professions, publications, bibliography, 5459

Education—Continued
 higher education—
 act of 1965, title 1, community service and continuing education, newsletter, 3126
 consortiums, guide, 7898
 how education and industry cooperate in scientific research, USSR, 8251
 human frontier, remarks on equality, 1006
 Indian children, study, authorization, report, 15137
 Indians, organizational location in Education Office or Indian Affairs Bureau, 13879
 instruction in State and local school systems, standard terminology, 10942
 instructional television and film, research, 9409
 international education act of 1966—
 law, 412
 legislative summary, etc., 8191
 international education, past, present, problems and prospects, report, 527
 inventory of counselor education programs, 16504
 is it relevant or just prevalent? (address), 12128
 Israel, modern system, development, 6187
 joint commission for review of operation of certain scholarship funds, agreement with Mexico, 7175
 laws—
 compendium, 12295
 text, 6122
 legislation, 1967, hearings, 12419
 low and moderate income groups, new programs, 8193
 Mao's China, 939
 materials, importation agreement, implementation—
 hearing, 951
 law, 371
 reports, 653, 655, 903
 materials, importation agreement, text, 5549
 medical problems in Tadzhikistan, 2474
 Muslim, reviewed in Soviet press, 1252
 NASA educational publications, lists, 2614, 16921
 nation of amateurs, school boards must lead the way (address), 9403
 national defense education act—
 administration of programs under title 3, notes and working papers, 17668
 amend, hearings, 15026, 15170, 16321
 counseling and guidance institutes, program, 6189
 graduate fellowship program for predoctoral study, 2187
 graduate fellowships, 1967-68 graduate programs, 4715
 institutes for advanced study, preparing, proposals, manual, 9401
 loans to nonprofit elementary and secondary schools for equipment and materials, 1007
 modern foreign language fellowship program, 7905
 science, mathematics and foreign language instruction, etc., financial assistance, guidelines, 13956
 student loan program, college work-study program and list of participating institutions, 1001
 title 6, language and area studies, summer, 1009
 national policy for American education (address), 10935
 nonprofessional in educational system, community action, 2165
 nonwhite women, educational attainment, fact sheet, 13185
 nuclear activities, guide, 5796
 objectives for Federal funds (address), 13957
 our common task (address), 2188

Education—Continued

PACAF basic bibliography, 8866
parent education, role in helping low-income families, survey of research, 10402
peering across the generation gap (address), 15214
physical therapists, opportunities, Army Medical Service, 4230
prekindergarten, New York State's program, 13962
program advisors, professional opportunities, examination announcement, 17462
program specialist and advisor, examination announcement, amdt., 10413
programs—
disadvantaged, Education Office, 6192
fact book, 7895
proposals, message from the President, 7602
projections, statistics to 1975-76, 4719
prose, poetry and black power (address), 9407
public—
in RSFSR, 12761
progress in United States 1966-67, report, 12469
French edition, 13955
Russian edition, 13960
Spanish edition, 13952
publications, price list, 5413
quiet revolution (address), 7892
realities of the learning market (address), 9408
re-educating confined delinquents, 2798-99
reference facts, 16706
reinforcing role of States, 2nd annual report of Advisory Council on State Department of Education, 13961
relationship to labor (address), 6589
research—
Education Office training program, 6194
postdoctoral fellowships, 1012
research in education (periodical), 1013, 3825
research or study abroad, overseas projects, 1014
returning disabled Vietnam veteran (remarks), 18143
role in alleviating rural poverty, 10917
scholarships, loans, and financial aids for dependents of Army personnel, 17383
scientific-pedagogical personnel, increasing reserves, USSR study, 11276
se habla español, help for Spanish-speaking youngsters, 13064
sons and daughters of deceased or disabled veterans, assistance, eligibility, etc., 17285
Southern States, problems (address), 2188
specialist and supervisory specialist, examination announcements, 205, 5931
State departments, publications on guidance, counseling and testing, guide, 6185
State educational records and reports series, handbooks, 10942, 16509
State government and education challenge (address), 1015
statistics, digest, 2180
summer projects, 9410
teacher, standards, 6195
teachers, exchange opportunities, 13958
teaching for the future (address), 13965
training activities under manpower development and training act, 9578
unfinished work for States (address), 2192
upward bound, 1967-68, program to help youth from low income families achieve college education, policy guidelines, etc., 9385
USSR—
educational institutions, development, 1227
translations, 3966

Education—Continued

veterans, permanent program, allowance increase—
hearings, 7758, 10859
law, 16133
report, 10792
veterinary medical facilities, construction grants, law, 423
visual and auditory materials of educational character, circulation, agreement and protocol, 5546
women—
continuing programs, 5607
trends in educational attainment, 7237, 7239, 13186, 14726
Yugoslavia, computer engineering problems, 1321
see also Ability grouping in education—
Colleges and universities—Compulsory education—Culture—Elementary education—Indian schools—Junior colleges—Naval education—Professional education—Programmed instruction—Schools—Secondary education—Teaching—Technical education—Vocational education—also subjects taught.
Education and Labor Committee, House: activities and accomplishments during 89th Congress, 4530
calendar, 8474
committee prints, 4530, 9154, 10647, 12295, 16322
expenditures, investigation—
hearings, 4544
report, 4517
hearings, 728-729, 2045-46, 4531-32, 6035, 7741-42, 9153, 10648, 12296, 15023-26, 16321, 16323-25, 17599-601
Investigations and studies—
authorization, report, 6021
expenses, report, 7724
reports, 9118, 10576, 12272, 12275, 14933, 14952, 14972, 16242, 16249, 16298, 17581
Education by television, see Television.
Education, Extension and Continuing, National Advisory Council on, see National Advisory Council on Extension and Continuing Education.
Education of Bilingual Children Advisory Committee, establish, hearings, 15170, 16321
Education Office:
annual report, 1966, on administration of laws granting Federal aid to schools, 6175
appropriations, 1968—
hearings, 16390
law, 12170
reports, 10616, 10766, 16372
centennial information booklet, progress of American education, 6191
Educational Research Information Center, scope of ERIC clearinghouses, 7893
financial assistance programs for State and local governments, etc., 2183
how it assists college students and colleges, 4712
Indian education, inquiry into transfer of responsibility from Indian Affairs Bureau, 13879
organization and functions, handbook, 7917
programs—
administered, 1967 report on Federal money for education, 7908
fact book, 6183
disadvantaged, 6192
handicapped, 4716
Research Bureau, support for research and related activities, description, 6193
research reports, 1956-65, resumes, 17720
study—
hearings, 729, 6035
preliminary report, 9154

INDEX 1967

Education Office—Continued
summer projects, special report, 9410
training program for educational research, 6194
what decentralization means to schools and colleges, decisions from the field, 16497
Education parks, plans to improve educational quality and desegregate schools, appraisals, 14850
Educational and cultural diplomacy, 7150
Educational boards and departments:
District of Columbia elected Board of Education act—
hearing, 17597
report, 16260
guidance, counseling and testing personnel, directory, 6178
Educational Foundation in Italy, *see* United States Educational Foundation in Italy.
Educational Foundation in Netherlands, *see* United States Educational Foundation in Netherlands.
Educational Foundation, United States-Israel, *see* United States-Israel Educational Foundation.
Educational institutions, *see* Colleges and universities.
Educational Materials Center, organization, activities, and services, 4710
Educational parks, *see* Education parks.
Educational Research Information Center:
research in education (periodical), 1013, 3825
research reports, 1956-65, resumes, 17720
scope of ERIC clearinghouses, 7893
Educators, nonprofessional in educational system, community action, 2165
Edwards, Lessie, relief, 13573
EEC, *see* European Economic Community.
EEG, *see* Electroencephalograms—Electroencephalography.
EEOC reports, clearinghouse service for business newsletters, etc., 12481
Effect of Federal programs on rural America, hearings, 17583
Efficiency ratings, airman, describing performance in administrative career ladder by identifying patterns of trait ratings, 11952
Efron, Daniel H., ethnopharmacologic search for psychoactive drugs, 17173
Eggen, D. T., 1000-Mwe sodium-cooled fast reactor, 1792, 5778
Eggs:
cleaning, improved methods, techniques, and equipment, 4122
commercial egg-producing farms, New Jersey, costs and returns, 16489
egg-type chick hatcheries, costs and economics of scale, 5649
foreign agriculture circulars, 3345
futures—
commitments of traders, 3112
trading and open contracts, 3369
good choice for thrifty family, food value, use, recipes, 9350
heat stability of egg white proteins under minimal conditions that kill salmonellae, 11918
how to buy by USDA grades and weight classes, 1701
market news reports, inventory, 6173
midwestern industry, competitive position, 5651
plants operating under USDA inspection and grading programs, list, 2137, 16446
poultry and egg situation (periodical), 3695
prices and price spreads in 12 major cities, 11943
processing plants, chemical compounds authorized for use under USDA inspection programs, list, 10878, 16445

Eggs—Continued
production—
home chicken flock, 10178
monthly, 5684, 10107
tests, U.S. and Canada, 1966 report, 4085
production, disposition, cash receipts, gross income—
1960-64, by States, revised estimates, 8848
1965-66, by States, 11875
products, liquid, frozen, solid production, 3229
Egypt, *see* United Arab Republic (Egypt).
Ehlersold, William B., review of United States oceanborne foreign trade, 17909
Ehrlich, Eugene, future potentials of navigation satellites, 11394
Eicke, W. G., designs for surveillance of volt maintained by standard cells, 17042
Eigenfunctions, upper and lower bounds for eigenvalues of vibrating beams with linearly varying axial load, 2609
Eigenvalues, *see* Eigenfunctions.
Eilbert, Richard L., antennas for Gemini VHF-UHF polarization experiment (D-14), 10009
Eilers, Robert D., actuarial services for dental service corporation, 11714
Eilers, Xavier W., selling in Canada, 16104
Eliras, Olibio S., Rodriguez, *see* Rodriguez, Olibio S.
Eisenberg, John F.:
behavior of Ateles geoffroyi and related species, 5590
rodent ethology with emphasis on evolution of social behavior, 15603
Eisenberg, Joseph D., high-energy fuels for supersonic transport reserve, 11532
Eisenhardt, N. H., dehydrated explosion puffed blueberries, 7249
Eisenhower Lock, St. Lawrence Seaway, investigation of concrete, 13987
Eisenhower trophy, NGB, announcement of winners, pamphlet, 14523
Ejectors:
jet—
for lift augmentation of VTOL aircraft, wind-tunnel investigation, 2706
thrust augmentation characteristics, 10290
static calibration of unit for simulation of jet engines in small-scale wind-tunnel models, 6899
Eklutna Lake, earthquake of Mar. 27, 1964, effects on Eklutna hydroelectric project, Anchorage, Alaska, 6402
Ekren, E. B., geological-geophysical investigations of bedrock in Island Falls quadrangle, Aroostook and Penobscot Counties, Maine, 6401
Elastic guides reduce hysteresis effect in Belleville spring package, 8450
Elastic strain, *see* Strains and stresses.
Elastic structures, *see* Elasticity.
Elasticity:
analog circuits for 2-dimensional distributed elastic structures, 5169
dynamic characteristics of variable-mass slender elastic body under high accelerations, 5188
liquid sloshing in elastic containers, 16906
plane, integral equation method, 9819
space vehicle flight control systems, analysis and design, elastic body equations, 15503
viscoelastic shear-damping mechanisms, damping of structural composites, 6728
Elastomers:
infrared spectrum, 15636
laminated elastomeric bearings in UH-1 helicopter tail rotor, evaluation, 17389
production and sales, 13161
silazane, remains resilient at 400° C, 6825
Elateridae, *see* Beetles.

- Elbel, Robert E., amblyceran Mallophaga found on Bucerotidae, 8541
- Elbert County, Colo., eastern part, soil survey report, 1611
- Elder, George H., relief, 605
- Elder, James L., technology and use of lignite, proceedings, Bureau of Mines-University of North Dakota symposium, etc., 1398
- Elderly people, *see* Aged.
- El Dorado, Kans., relief, 791
- Eldorado Springs quadrangle, Colo., geology, 11165
- Eldorado Valley area, Nev., soil survey report, 14602
- Elections:
- campaign expenditures committee, 1966, report, 4516
 - conducted by NLRB for you on the job, information for voters, 12994
 - District of Columbia elected Board of Education act—
 - hearing, 17597
 - report, 16260
 - electing union officers, requirements under labor-management reporting and disclosure act, 8286
 - employee representation, conducted by NLRB, reports, 3589
 - Guam governor, etc., popular election—
 - hearings, 10852
 - report, 10750
 - industrial democracy—
 - millions of ballots for, 6938
 - 25 millionth vote, 8532
 - investigation, expenses, report, 4611
 - local union election appeals, analysis, 6592
 - political campaigns, financing—
 - proposals, hearings, 16408
 - remarks, 2952
 - predictions and projections of results, effects—
 - hearings, 16400
 - report, 15143
 - President of United States, amend equal time provisions of communications act, hearings, 16400
 - reform act of 1966—
 - committee reprint, 4543
 - hearings, 739
 - reform act of 1967—
 - hearings, 13884
 - message from the President, 10523
 - report, 15108
 - Virgin Islands governor, etc., popular election—
 - hearings, 10852
 - report, 10751
 - voting and registration in elections of Nov. 1966, population characteristics, 5877
 - see also* Contested elections.
- Elective offices of State and local governments, 13361
- Electric apparatus and appliances:
- component technology for space power systems, design studies, 15964-965, 17399
 - electric housewares and fans, current industrial reports, 4326, 15993
 - electrical instrument shipments, 1960-65, analysis, 1826
 - engineered performance standards, public works maintenance, handbook, 14567
 - equipment components, Federal item identification guides for supply cataloging, supplements, 3289
 - information center for electrical equipment, USSR, 15377
 - inspection tips, safe use of portable electric equipment, 6602
 - safe practices, 9724
 - USSR industrial development, translations, 4018
- Electric arc:
- constricted, characteristics of gas flowing axially through, numerical calculations, 12955
 - Electric arc—Continued
 - laboratory arc furnace features interchangeable hearths, 8392
 - opposed arcs permit deep weld penetration with only 1 pass, 2644
 - standard light-sensitive paper for calibrating carbon arcs used in testing textiles for colorfastness to light, recommended method, 12981
- Electric batteries:
- circuit prevents overcharging of secondary cell batteries, 1471
 - classification definitions, 18125
 - dynamics of water rejection from hydrogen-oxygen fuel cell to hydrogen stream, 18031
- Fuel cells—
- Government-sponsored research, 1950-64, review, 15514
 - potentiostatic current-potential measurements on platinum electrode in high-purity closed system, 10011
- High rate batteries, 8596
- Primary cell uses neither liquid nor fused electrolytes, 15544
- Primary cells utilize halogen-organic charge transfer complex, 6837
- see also* Storage batteries.
- Electric cables:
- clamp bolt fixture facilitates assembly in close quarters, 15533
 - coaxial, connector acts as quick coupling, 6783
 - coaxial transmission line opening onto flat, dielectric-covered ground plane, input admittance, 16393
 - consolidated identification list for test evaluation, Federal supply catalog, Defense Dept. section, 3320
- Insulated—
- current industrial reports, 5865
 - methods of testing, Federal standard, 15252
- Insulation of individual conductors in multiple-strand cables, tester for automatic checking, 14369
- Logic circuitry used to automatically test shielded cables, 6819
- Metal flame spray coating protects electrical cables in extreme environment, 17931
- Multipurpose instrumentation cable provides integral thermocouple circuit, 8391
- Plug-in connector socket accepts coaxial cable end, 5144
- Power, rubber-insulated, general purpose, Federal standard, cancellation, 1072
- Electric circuit breakers, solid state recoverable fuse functions as circuit breaker, 6845
- Electric circuits, *see* Circuits.
- Electric communications, *see* Telecommunications.
- Electric conductivity:
- ionic conductivity of calcium and strontium fluorides, 6866
 - sensitive bridge circuit measures conductance of low-conductivity electrolyte solutions, 16880
 - soil conductivity, USSR, measurements, 14229
- Electric conductors:
- classification definitions, 18128
 - high strength, tungsten fiber-reinforced copper composites form, 2678
 - insulation of individual conductors in multiple-strand cables, tester for automatic checking, 14369
 - see also* Semiconductors.
- Electric conduits, Federal item identification guide, 17694
- Electric connectors, *see* Connectors (electric).

INDEX 1967

- Electric contacts:
 - bonds, improving in silicon integrated circuits, 16965
 - brushes, Federal item identification guide for supply cataloging, 6148
 - thin film process forms effective electrical contacts on semiconductor crystals, 11471
- Electric current converters:
 - highpower dc/dc electrical power conversion techniques developed, 17997
 - low-input voltage converter/regulator minimizes external disturbances, 6843
 - solid-state time-to-pulse-height converter developed, 8393
 - switching-type regulator circuit has increased efficiency, 12910
- Electric currents:
 - bipolar driver for memory circuits, 2627
 - clamp provides efficient connection for high-density currents, 11469
 - direct current converted to multiphase supplies by signal generator, 17979
 - electric current abroad, tabulation, 17415
 - interrupted periodically in charging, influence on discharge capacity of electrode, 9998
 - linear Hall accelerators, instabilities, 5175
 - microcurrent generator produces electrical currents accurately between 10^{-11} ampere to 10^3 ampere, 8401
 - steering commutator offers versatility, 18005
 - thermogalvanic couples, calculation of parameters, 1241
- Electric discharge:
 - capacity of electrode, changing by charging with interrupted current, 9998
 - helium-neon laser discharge parameter study, 17086
- Electric energy, *see* Electricity.
- Electric engineering:
 - Communist Chinese abstracts, 3119
 - East European abstracts, 3221
 - regulations, 9001
 - shore establishments, Naval Facilities Engineering Command, design manual, 18095
 - USSR abstracts, 4028
- Electric equipment, *see* Electric apparatus and appliances.
- Electric fans:
 - crossflow ventilation for grain storages, 7248
 - current industrial reports, 4326, 15993
- Electric fields:
 - absolute measurements using field mills, 13035
 - boiling heat transfer with electrical field, 13354
 - new near-zone electric field-strength meter, 5291
- Electric furnaces:
 - classification definitions, 18118
 - laboratory are furnace features interchangeable hearths, 8392
 - radial furnaces, use for growing straight boron carbide whiskers, 9836
- Electric generators, SNAP alternator speed controller and alternator performance results, voltage distortion effects, 12950
 - see also* Signal generators.
- Electric heating elements, immersion and nonimmersion, Federal item identification guide, 16462
- Electric insulation, *see* Insulation.
- Electric lamps:
 - bulbs, short life, subcommittee report, 4542
 - current industrial reports, 3169-70, 15994
 - desk light, Federal standard, 17764
 - fluorescent, ballasts, current industrial reports, 3170, 13391
- Electric lighting, *see* Electricity.
- Electric lines:
 - appropriations, 1968, underground electric power transmission research, hearings, 12287
 - Mosenergo high-voltage overhead electric power network, USSR development study, 6550
 - reinforced concrete supports for overhead lines, 6536
- Electric locomotives, *see* Locomotives.
- Electric machinery, *see* Machinery.
- Electric motors, solid state circuit controls direction, speed, and braking of dc motor, 1467
- Electric networks, transient analysis generator simulates behavior, 16954
- Electric plants, *see* Electric power plants.
- Electric power, *see* Electricity.
- Electric power distribution, *see* Electricity.
- Electric power distributors, *see* Electricity.
- Electric power plants:
 - Bratsk and Krasnotarsk hydroelectric projects in central Siberia, USSR, bibliography, 8665
 - capacity of electric generating plants, world power data, 1058
 - distribution systems of electrical power stations and substations, USSR study, 2442
 - earthquake of Mar. 27, 1964, effects on Eklutna hydroelectric project, Anchorage, Alaska, 6402
 - hydroelectric, 1965, construction cost and production expenses, 11017
 - maintenance and operation, Air Force manual, 8565
 - Soviet installation of magnetohydrodynamic generator, 15428
 - steam, coal resources of southwestern Utah, potential for use, 8341
 - steam-electric plants, construction cost and production expenses, 6263
- Electric probes:
 - electron temperature variations in exhaust of magnetoplasma dynamic arc, Langmuir probe analysis, 18047
 - electrostatic planar and spherical probes theory, 6722
- Electric relays:
 - automatic, electrical continuity scanner facilitates identification of wires for soldering to connectors, 6768
 - magnetoresistor monitors relay performance, 6810
 - relays and industrial controls, current industrial reports, 4343
 - trisphere spark gap actuates overvoltage relay, 2671
- Electric resistance:
 - iron, pure, residual ratio, 5348
 - low cost instrument to measure accurately, 11127
- Electric resistors:
 - fixed and adjustable, Federal item identification guide for supply cataloging, 10894
 - resistor monitors transfer of liquid helium, 6750
- Electric resonance, frequencies of dielectric sphere immersed in plasma, 12929
- Electric shock, control of electrical shock hazards, student reference, 9732
- Electric shutter gates image orthicon on and off, 15540
- Electric slip rings:
 - miniature, environmental study, 14419
 - silver-base ternary alloy proves superior for slip ring lead wires, 5212
 - wear studies, 18003
- Electric switchgear:
 - current industrial reports, 4343

Electric switchgear—Continued

hybrid solid state switch replaces motor-driven power switch, 12896
low rate flow switch can be used for gas or liquid, 8477
preregulator feedback circuit utilizes light actuated switch, 2663
rugged switch responds to minute pressure differentials, 17996
switches, magnetically operated, classification bulletin, 2785
vacuum clamp switch for Pharos capacitor bank, 9984
vacuum switchgear, survey, 8440
variable reluctance switch avoids contact corrosion and contact bounce, 11466

Electric transformers, high frequency wide band, uses coax to achieve high turn ratio and flat response, 8398

Electric typewriters, see Typewriters.**Electric utilities:**

statistics, 1965—
class A and B privately owned, 6262
publicly owned, 12508

Electric vehicles:

automobile and air pollution, report of Panel on Electrically Powered Vehicles, 17470
development, 16580
development act of 1967, program of research, etc., hearings, 13856
evaluation of battery-powered vehicles, 9770

Electric waves, millimeter-wave generation with electron-beam devices, etc., 6854

Electric wire and wiring:

consolidated identification list for test evaluation, Federal supply catalog, Defense Dept. section, 3520
devices and supplies, current industrial reports, 4345, 16007
Federal item identification guides for supply cataloging, supplements, 3289
hook up and lead wire, identification coding and application, military standard, 12444

Insulated—

current industrial reports, 5865
methods of testing, Federal standard, 15252
printed-wiring, terms and definitions, military standard, 16465
rubber-insulated wire, general purpose, Federal standard, cancellation, 1072
soldering to connectors, electrical continuity scanner facilitates identification, 6768
traveling wire electrode increased productivity of electrical discharge machining equipment, 15490
wire insulation, mechanical properties automatically determined, 17981
wire size, occupational safety aid, 9709

Electric wiring, see Electric wire and wiring.

Electrical, see headings beginning Electric.

Electrical equipment, see Electric apparatus and appliances.

Electrical potential, see Electromotive force.

Electricians:

aviation electrician's mate 1 & C, Navy training course, 11653
construction 3 & 2, Navy training course, 15631
safe work guide, 11303

Electricity:

all-electric homes, annual bills, 4771
appropriations, 1968, underground electric power transmission research, hearings, 12287
basic, fire control technicians, trainee's guide, 1543
Bonneville power generator and sales statistics, 7448, 15982
capacity of electric generating plants and production of electric energy, 1058
classification bulletin, 2785

Electricity—Continued

control circuit ensures solar cell operation at maximum power, 9832

electric bulk power supply, reliability, advisory committee report, 14030

electric energy and selected supplies used, census of mineral industries, 7470

electric lighting fixtures, current industrial reports, 5858

electric power statistics, 3230

electric power, USSR industrial development, translations, 4018

electrical energy transmission to vehicles, classification definitions, 18131

Federal power act, regulations, 3816

federally owned electric power, sale to government of Virgin Islands, Virgin Islands Corporation, Interior Dept., General Services Admin., GAO review, 8146

fuels and electric energy used, by major groups, etc., annual survey of manufactures, 17419

hazards of low voltage electricity, 9711

hydroelectric power—

development laws, compilation, 1984

pumped storage, bibliography, 14707

improved fluid control circuit operates on low power input, 9827

mid-Atlantic power failure, June 5, 1967, hearings, 13850

national electric rate book, 1050-57, 2248-53, 3595, 4772-78, 6264, 9457-58, 11018-27, 12510-512, 14027-29, 15245-246, 16582-585

Northeast power failure of Nov. 9 and 10, 1965—

analysis and recommendations, 14030

final report to the President, 14030

studies of task groups on power interruption, 14030

nuclear energy for electric power (remarks), 8914

power and distribution equipment, Federal item identification guides for supply cataloging, supplements, 3289

power failures, prevention, 14030

Power Use Conference proceedings, 10323

principal electric facilities, map, United States, 7974

propulsion and power production, French frigate Suffren, 9670

publications, price list, 1562

purchased by REA borrowers, annual report, 10074

retail prices and indexes, 3830

rural—

borrowers, statistical report, 18199

electric cooperatives, annual meeting guide, 1005

facility serving Puerto-Cito Reservation, dedication (remarks), 15875

farms electrified with central station service, 2850, 17188

materials acceptable on systems of REA borrowers, list, 3512, 8672, 17187

program, financing, supplemental, hearings 938

publications price list, 7055

REA cooperatives and public utilities situated in single State, exempt from FPC jurisdiction, hearings, 16401

statistical bulletin, 3800

supplemental financing—

hearings, 10625

report, 18659

underground distribution, 17190

utility pole performance study, 1597

rural electrification act of 1936, amend, hearings, 938, 17585

simple technique determines ac properties of hard superconductive materials, 6817

southeastern Federal power program, financial statements, 1966, GAO examination, 15296

INDEX 1967

Electricity—Continued

- standard arc welders provide high amperage direct current source, 1448
- thermionic diode controlled power system, development, 1433
- TVA—**
 - municipal and cooperative distributors, 1966 operations, 5568
 - power 1966 annual report, 1651
 - power program, 17263
 - sales statistics, retail distribution, 3231
 - typical bills, residential, commercial, and industrial services, 4770
 - U.S. power system, reliability, 14030
- see also* Atmospheric electricity.
- Electroanesthesia, see** Electroshock therapy.
- Electrocardiograms:**
 - multifocal premature contractions, ECG finding of grave significance, 15897
 - spray-on electrodes enable ECG monitoring of physically active subjects, 9825C
- Electrocardiography, computers and public health, report of recent studies, 11723**
- Electrochemical analysis, coal, reduction, 16862**
- Electrochemical Analysis Section, National Bureau of Standards, activities, July 1966–June 1967, summary, 18080**
- Electrochemical technique for measuring carbon dioxide content of blood, 10243**
- Electrochemistry:**
 - carbon dioxide sensor, 17354
 - electrochemical reduction of chlorine on carbon in molten lithium chloride-potassium chloride, 17003
- see also* Electrochemical analysis.
- Electrodeposition:**
 - copper alloys from cyanide electrolytes, ultrasonics effect, 9781
 - iridium, from fused sodium cyanide and aqueous electrolytes, 16865
 - platinum and palladium thick coatings on refractory metals from aqueous electrolytes, 16861
- Electrodes:**
 - consumable, touch-start power arc welder, 6803
 - cryogenic cooling reduce high voltage arcing between electrodes operating in vacuum, 5146
 - glass, flow apparatus to determine acidity constant of true carbonic acid and its rate of dehydration, 12734
 - ion, use in measurement of serum ionic calcium, 13271
 - large-gap coaxial-cylinder, high-voltage characteristics, 9908
 - organic adsorption, 10003
 - pasting, exploratory investigation, 8596
 - plasma jet, longer operating life, 8385
 - platinum—
 - in high-purity closed system, potentiostatic current-potential measurements, 10011
 - interaction of carbon dioxide with hydrogen chemisorbed, errata, 8586
 - silver oxide, changing discharge capacity by charging with interrupted current, 9998
 - spinning electrode system on spark-source mass spectrograph for study of aromatic hydrocarbons, 11380
 - spray-on, enable ECG monitoring of physically active subjects, 9825C
 - traveling wire, use to increase productivity of electrical discharge machining equipment, 15490
- Electrodialysis, see** Dialysis.
- Electroencephalogram, auto- and cross-correlation of EEG following unilateral caloric stimulation of labyrinth, 71**
- Electroencephalography:**
 - helmet system broadcasts electroencephalograms of wearer, 2660
 - sleep deprivation, prolonged stage 4 and 1-REM, comparison of effects, 15900

Electrolysis:

- aluminum, fluorine balance determination, USSR study, 9645
- cell for orbital test for water electrolysis, 2607
- cell, water-vapor, with phosphoric acid electrolyte, 12858
- electrowinning and tapping of lanthanum metal, 2586
- high-purity neodymium, praseodymium, and didymium metals, electrowinning from their oxides, 11384
- Electrolytes:**
 - fused sodium cyanide compared to aqueous, in electrodeposition of iridium, 16865
 - low conductivity solutions, sensitive bridge circuit measures conductance, 16880
 - new may increase life of polarographic oxygen sensors, 6740
 - oxide, solid, for electrolytic dissociation of $\text{Co}_2\text{H}_2\text{O}$, study, 6715
 - phosphoric acid, water-vapor electrolysis cell, 12858
 - transport through membrane systems, 15332
- Electrolytic cells:**
 - lead-acid cell operation, refractometric sensing of H_2SO_4 specific gravity, 18112
 - primary cell uses neither liquid nor fused electrolytes, 15544
 - saturated standard, surveillance of volt maintained, designs, 17042
 - thermally regenerative galvanic cell, iron serves as diffusion barrier, 12843
 - water-vapor electrolysis cell with phosphoric acid electrolyte, 12858
- Electrolytic dissociation of $\text{CO}_2\text{H}_2\text{O}$ using solid electrolyte, study, 6715**
- Electrolytic methods for producing titanium and titanium alloys, 2579**
- Electrolytic separation processes, use for producing ductile vanadium, 12825**
- Electromagnetic current meter, measuring current with EMIT while ship is turning, theoretical foundations of method, USSR study, 1170**
- Electromagnetic fields:**
 - effect on central nervous system, 14504
 - magnetic line source excited cylinder, radiation through plasma sheath, 5176
- Electromagnetic pumps, see** Pumps.
- Electromagnetic waves, see** Electric waves.
- Electromagnetism:**
 - brazed joint quality tested electromagnetically, 16964
 - electromagnetic guidance study, 16896
 - exact semiclassical theory for galvanomagnetic effects in metals, 15581
 - high transients suppressed in electromagnetic devices, 8463
- Electromagnets, classification bulletin, 2785**
- Electromechanical drive, see** Drive (electromechanical).
- Electromechanical model of man's muscles and its use in programmed teaching, USSR, 2466**
- Electrometallurgy:**
 - lead-zinc sinter, complex, electric smelting, 14353
 - vanadium, ductile, electrolytic process for producing, 12825
- Electrometer amplifier operates over dynamic range of 5 orders of magnitude, 14414**
- Electromigration, solid-state, of impurities in cerium metal, 6129**
- Electromotive force, computer programs calculate potential and charge distributions in plasma, 2668**
- Electron beams:**
 - devices, millimeter-wave generation, survey, 6854
 - parallel X-ray generator, 17083
 - pre-bunched beam from linear accelerator, use in plasma oscillations experiment, 12870

Electron beams—Continued

- use in purification of vanadium, 15480
- welder X-rays its own welds, 14423
- Electron bombardment:**
 - ion thrusters—
 - dynamic characteristics, 18033
 - onset of anomalous diffusion, 2710
 - mercury ion thrusters—
 - accelerator grid durability tests, 14462
 - cathode durability tests, 12960
 - oxide-cathode durability, 6867
- Electron capture, determination of phenoxo acid herbicides in water and microcoulometric gas chromatography, 15312**
- Electron diffraction, electron optical survey of iron oxide films produced in H_2O , $LiOH$, and $LiOH/EDTA$ solutions, 8594**
- Electron gas in magnetic field, 11569**
- Electron micrographs, replica method for observation of micrometeorite craters in metal substrates, 9815**
- Electron microscopes:**
 - employs new video display technique, 16884
 - investigation of structure of cerebral cortex and mitochondrial nerve cells, USSR study, 15348
- Electron microscopy:**
 - electron-histochemical investigation of experimental myocardial ischemia, 14219
 - electron microscopic study of cerebral cortex of man and experimental animals in convulsive states, USSR, 12752
 - histochemical methods, USSR study, 12661
- Electron multipliers, improved performance and stability, 11438**
- Electron probe microanalysis:**
 - qualitative, X-ray wavelength conversion tables and graphs, 17039
 - scanning, 5288
- Electron spin resonance, research conducted in field of macromolecular chemistry, Hungary, report, 11256**
- Electron scattering, see Scattering.**
- Electron tubes:**
 - and associated hardware, consolidated identification list for test evaluation, Federal supply catalog, Defense Dept. section, 2151, 3319, 7856
 - space applications, requirements, 5231
 - television and radio receiving tubes, temporary suspension of duty, report, 2028
- Electronarcosis, see Electroshock therapy.**
- Electronic apparatus and appliances, see Electronics.**
- Electronic circuits, see Circuits.**
- Electronic computers:**
 - abscissas and weights for Gaussian quadrature, 5284
 - acquisition and installation of computers by Army, Pacific, GAO review, 9552
 - alphanumeric map information assembly and display system for large computer, 14142
 - analog—
 - determines moments of inertia of asymmetrical objects, 6798
 - parasitic-load speed control for solar-Brayton system turboalternator study, 5258
 - simulation, application of stereoscopic display system, 6757
 - use of passive circuit for study of square plates, 5168
 - analog and digital computer requirements in USSR, 1236
 - analysis of interpreter-computer reporting techniques, 7403
 - applied mathematics, computers, and information models, USSR study, 16735
 - attempts to free engineer from need to master computer language, USSR study, 5020
 - BESM-6 computer, USSR study, 1316

Electronic computers—Continued

- blind programmers, translator program converts computer printout into Braille language, 11441
- central digital data acquisition system, computer-controlled, 11492
- choice of parameters of influence functions using, USSR study, 1181
- CINDA, Chrysler improved numerical differencing analyzer program, 15546
- Communist Chinese abstracts, 3117
- computational procedure for finite difference solution of one-dimensional heat conduction problems reduces computer time, 2675
- computer and invasion of privacy by Government agencies, hearings, print additional copies, reports, 10592, 10788
- computer engineering in railroad transportation, USSR study, 1173
- computer program—
 - calculates monotonic maximum likelihood estimates using method of reversals, 11465
 - calculating allowable cut using area-volume check method, 8080
 - simplifies transient and steady-state temperature prediction for complex body shapes, 9825A
- computer solution of exponential decay or washout curves, evaluation, 15894
- computer technology, USSR—
 - developments, 15394
 - problems in assimilating, 2449
- computerized parts list system coordinates engineering releases, parts control, and manufacturing planning, 17929
- cybernetic testing, 8864
- data reduction technique for Langmuir probe analysis of electron temperature variations in exhaust of magnetoplasma-dynamic arc, 18047
- digital—
 - adaptive control system, theoretical and experimental research, 5170, 14378
 - application to formulation of problems in curvilinear coordinate systems, 9906
 - codes for design and evaluation of convectively cooled nuclear-type rocket nozzle, application, 5269
 - computation systems for real-time training simulators, military standard, 9373
 - control bessemer converter process, USSR study, 1253
 - control for automatic addressing of goods, USSR book excerpts, 15383
 - high-speed, structural analysis and matrix interpretive system, 12899
 - PRESTO II program for trajectory optimization, 6717
 - program for analysis and design of state variable feedback systems, 14397
 - program for calculating steady temperature, etc., in gas containing heat sources, 16987
 - superregulation of nanosecond amplifier-discriminator circuit, 5147
 - telegraphy input-output devices, USSR study, 1254
 - use in processing X-ray photos, 6741
 - Zam series, USSR study, 1308
- digital filters, random process theory aids study, 16952
- digital frequency counter permits readout without disturbing counting process, 6818
- digital plotters, subroutines GEORGE and DRASTC, simplify operation, 15485
- East European abstracts 3219
- geographic coding for 1970 census (paper), 4304
- guidance computer memories, present and future state of the art, 18049
- impact on job analysis in Air Force, 13268

INDEX 1967

Electronic computers—Continued

internal magnetization of seamounts and its computer calculation, 12612
 machine for engineering calculations, USSR study, 1214
 manipulating dates and time lapses in computerized records system, 72
 mathematical computer programs, compilation, 5196
 mathematical problems of cybernetics and computer engineering, USSR study, 16784
 method of fitting surfaces to assay and other data in three dimensions by quadratic-regression analysis, 2580
 midcourse navigation using statistical filter theory, manual theodolite, and symbolic computer control, 6905
 Minsk-22 digital computer at Hungarian computer center, operation described, 15355
 modal combination program for dynamic analysis of structures, 15527
 MOFSET analog memory circuit achieves long duration signal storage, 6766
 NELLAC-V program, calculate components of earth's magnetic field, 17083
 new electronic computers developed, USSR study, 4949
 power-spectral-density program, 11481
 predicting 3-phase flow in 5-spot water-floods, techniques 15477
 privacy, role of computer as potential invasion, hearings, 10856
 programming—
 computes single-point failures in critical system designs, 11437
 detects transient malfunctions in switching circuits, 9826
 forestry, evaluating long-term investments, 14131
 gamma-ray spectra, analysis by method of least squares, 8630
 land landing couch dynamics, 15530
 linear ac electrical and electronic circuits for steady-state conditions, 16962
 log lumber recovery and value, program, 14080
 MAP (Macro assembly program) read-routine for IBM 7094 Fortran II binary tapes, 4845
 Monte Carlo techniques for statistical system performance analysis, 16950
 natural frequencies of closed spherical shells determined, 16939
 oceanography, 14570
 performs flow analysis through turbines, 1472
 PRESTO for rapid earth-to-space trajectory optimization, errata, 5157
 PRESTO version delta, 5178A
 radiative, conductive, and convective heat transfer problems for variety of geometries, 17959
 samples digital data for CRT display, 14440
 stimulates physical systems by solving simultaneous differential equations describing systems, 15526
 STOP, supersonic transport optimization trajectory, 11415
 subroutine ISUDS accurately solves large system of simultaneous linear algebraic equations, 17926
 systems for reduction and analysis of hydrologic data, 13197
 velocities and streamlines, calculating for 2-dimensional, incompressible flow in axial blade rows, 5245
 programs—
 ablation analysis, 2724
 analog computation use in predicting dynamic temperature excursions in orbiting spacecraft, 6853
 auto-diagrammer, 2682

Electronic computers—Continued

programs—continued
 calculate potential and charge distributions in plasma, 2668
 calculating veneer recovery volume and value, 10644
 chemical equilibria determination in complex systems, 6823
 determines inventory size, 2641
 determines performance efficiency of remote measuring systems, 2638
 elastic analysis of highly redundant structural configurations, 17960
 equilibrium thermodynamic properties of gases, 9898
 equivalent circuit for field effect transistor for computer simulation, 6844
 finite-difference solutions of shells of revolution under asymmetric loads, 11497
 linear sampled-data analysis for high order systems, 16942
 multiple correlation determines relations between several independent and dependent variables, 16961
 numerically controlled milling machines, 2662
 off-design performance of axial flow turbines, 8411
 optimization finds value for independent variables that minimize dependent variable, 17958
 PERT technique monitors actual versus allocated costs, 8458
 predicts thermal and flow transients experienced in reactor loss-of-flow accident, 17919
 reduces calculation time of normal response functions, 11446
 routine adds plotting capabilities to existing programs, 2643
 satellite position display, 8595
 searches characteristic data of diodes and transistors, 2654
 simulates design, test, and analysis phases of sensitivity experiments, 11439
 space trajectories, for IBM-7090, 15524
 spectral analyses of up to 7 time series, 2661
 statistical analysis for random processes, 2652
 subroutine allows easy computation in extended precision arithmetic, 2639
 transient analysis generator simulates behavior of electrical networks, 16954
 VARI-QUIR III provides solution of steady-state, multigroup, 2-dimensional neutron diffusion equations, 17927
 random integer dispenser, 14116
 recognition devices, engineers aided in designing through study of brain diseases, USSR study, 6488
 Rumanian colloquy, 1277
 satellite telemetry data simulation program, generalized, 1508
 Setun, using weather satellite data for automatic compilation of cloud maps, USSR study, 12660
 simulation of plasma and many-body problems, symposium, 16928
 solid propellant rocket motor performance computer programs using group transformation method, 1483
 Soviet Minsk-2, and biochemistry, Bulgarian study, 4947
 SPAD formatter, buffer interface between satellite prediction computer and display, 8593
 stability theory of multistep methods, 11523
 stored-program computer application to small scientific spacecraft, 11533
 teaching dynamic system behavior, 62
 technology in Soviet economy, 1310

Electronic computers—Continued
 technology of production, USSR study, 6493
 time, leisure, and computer, crisis of modern technology (remarks), 5799
 triple modular redundancy operation improved, 9848
 Ural-4, microlanguage programming and sorting on magnetic tape, USSR study, 12758
 uses—
 analysis of nuclear facilities experimental data and control, 14808
 evaluation of design parameters and cost of heat exchangers, 14324
 higher education, report of advisory committee, 8615
 scientific experiments, USSR study, 11245
 USSR abstracts, 4027
 USSR centers and automatic accounting and control systems, 1340
 VULCAN (digital computer depletion program), use with independent 1-dimensional spatial calculations, 16990
 X-11 variant of census method II seasonal adjustment program, 5902
 Electronic counters, counting and sizing rabbit spermatozoa, 11954
 Electronic cross sections, *see* Cross sections.
 Electronic data processing systems:
 application—
 organization control systems, USSR study, 1273
 seabirds numerical coding, study, 14536
 base procurement mechanization system, AF manual, 10211
 bills and statements of account prepared by electronic data processing equipment, classify as 1st-class mail, amend U.S. code, hearing, 12424
 careers in automatic data processing, Veterans Administration, 17287
 coding and keypunching geological information form for core, grab and dredge samples, 6997
 command information processing systems, human factors research, 119
 computer tape, pocket-size manual tape reader device aids checking, 17972
 data processing—
 DSA civilian career program, 13910
 management in Federal Government, hearings, 16328
 Social Security Administration (lectures), 15737
 digital filters for non-real-time data processing, 17935
 digital magnetic tape system for recording radar data, 17096
 equipment, Federal item identification guides for supply cataloging, supplements, 3202
 FORTRAN programs—
 calculation of hourly values of astronomical tide, etc., 9428
 calculation of Wigner 3j, 6j, and 9j coefficients for angular momenta, 1526
 chemical kinetics effects on exhaust-nozzle performance, determining, 15575
 computation of Weber functions and derivatives, 8484
 contour plotting, utilizes subroutines, 16958
 determining chemical composition of physical system at equilibrium, 9825E
 GAKOL code, calculation of resonance neutron absorption, 15486
 request oriented information selection, 8506
 rotating components of turbomachinery, design simplification calculations, 15488

Electronic data processing systems—Con.
 FORTRAN programs—Continued
 steady-state temperature distribution, calculating procedure, etc., 15487
 thermodynamic data, calculation, 15566
 Hungarian data processing programs, 15375
 industrial plant equipment handbook, 7848
 inter-agency coordination of planning to take advantage of technological improvements relating to—
 agency-Treasury operations, 10119
 disbursing and banking operations of the Government, 10118
 linear circuit analysis program for IBM 1620 Monitor II data processing system, etc., 15525
 management of automatic data processing in Federal Government, training programs, ADP Management Training Center, 16062
 MAP (Macro assembly program) (read-routine for IBM 7094 Fortran II binary tapes, 4845
 multipurpose data acquisition system for instrumentation of nearshore environment, 16522
 northeastern forest-inventory data-processing system, 11134
 problems of science of production engineering, USSR study, 2432
 Project LITE (legal information through electronics), hearing, 15034
 STARS II, fully automatic satellite data processor, description, etc., 11527
 USSR data processing units, ISKRA-1, ISKRA-2, POISK OK-1 and POISK DV-1, 1216
 Electronic dummy for acoustical testing, 16946
 Electronic engineers, job types, 4170
 Electronic equipment:
 automatic electronic test and checkout, definition of terms, military standard, 7861
 components—
 Federal item identification guides for supply cataloging, supplements, 3289
 process reduces secondary resonant emission, 6839
 encapsulation of electronic parts in plastics, review, 7864
 engineered performance standards, public works maintenance, handbook, 14567
 guided missiles preferred items list, military standard, 7862
 maintenance, Coast Guard manual, 4416
 amendment, 10441
 packaging, Navy systems design guidelines manual, 17099
 selected electronic and associated products, current industrial reports, 5871
 underwater robot being developed for ocean research, USSR study, 6568
 see also Electronics.
 Electronic filter discriminates between true and false reflections, 9837
 Electronic frequency discriminator, 12888
 Electronic measuring instruments:
 digital measuring devices, new design, USSR study, 9656
 Randle cliff radar digital range-measuring instrument, 18114
 Electronic modules:
 embedment stresses, use of transducer to measure, 17978
 microelectronic module, repairable, high-density, provides effective heat sink, 17967
 packaging, 6822
 weld joint damage, test device prevents by eliminating pin forces on unpotted modules, 17970
 Electronic stethoscopes, *see* Stethoscopes.

INDEX 1967

Electronic switches:
automatic channel switching device, 9849
computer program detects transient malfunctions in circuits, 9826
integrator easily set and reset using electronic switch, 11464
Electronic Systems Division, technical reports, 62-65, 4166, 8861-64, 13262
Electronic technicians:
class C—
AN/GRC-27A, radio maintenance course, trainee's guide, 11666
AN/SRC-20, AN/SRC-21, radio sets, trainee's guide, 8582
examination announcement, 1910
Electronic test instrument generates extremely small current signals, 17923
Electronics:
administration, trainee's guide, 2782
aids for physician, USSR study, 1329
biology and medicine application, USSR research, 4970
circuitry, NASA report, 5193
communications, activities—
Air Force manuals, 10217-219
terminology, Air Force manual, 8856
communications-electronics reference data, Army field manual, 1760
communications principles and applications of mathematics, technical manual, change, 15953
Communist Chinese abstracts, 3119
East European abstracts, 3221
East European industries, translations, 3955
electronic-mechanical method of measuring air current velocities, USSR study, 1178
fire control electronics, trainee's guide, 2776
fire control technician training, test equipment, trainee's guide, 7023
high intensity radiation dosimetry measured with SEMIRAD (secondary-electron mixed-radiation dosimeters), 4219A
installation and maintenance book, change, 2853
microelectronic module, repairable, high-density, provides effective heat sink, 17967
microelectronic terms and definitions, military standard, 13922
maintenance, Coast Guard manual, 4416
amendment, 10441
medical, new devices developed, USSR study, 1264
more Belorussian scientists and engineers needed to train specialists in microelectronics, 1271
physiological research, USSR study, 4964
products in Australia, market information, 16105
publications, price list, 1562
technology, 2-year post high school curriculum, 1000
USSR—
abstracts, 4028
industrial development, translations, 4019
Electronics mechanics:
communications relay equipment operator, examination announcement, amdt., 203
electronics technicians, examination announcement, 12109
examination announcement, amdt., 203
Electronics technicians, *see* Electronics mechanics.
Electrons:
angular distribution of thick-target bremsstrahlung which includes multiple electron scatterings, 14466
density, concept for using laser beams to measure in plasmas, 6807
density in topside ionosphere, Alouette I observations, 2617, 6736, 16930
electron-sensitive solid state matrix, research and development, 16897

Electrons—Continued
energy required to produce electron-hole pair in silicon by tritons, 1501
estimation of electron impact cross sections for molecular hydrogen, 11546
flow in low-density argon gas including space-charge and elastic collisions, 14480
free, in presence of magnetic field, ultrasonic attenuation, theoretical investigation, 2705
inertia effects of ion cyclotron wave generation in uniform and nonuniform plasma, 12962
irradiation, effects from 20 KeV to 1 MeV on polyethylene terephthalate capacitor-type meteoroid detector, 1491
irradiation of mylar, charge storage effects, 2610
low energy, collision cross section data, bibliography, 8521
magnetically induced nonequilibrium electron temperatures, 9995
Monte Carlo code for solution of planar electron-diode problems including electron-neutral elastic collisions, 15558
paramagnetic resonance and magnetic susceptibility of CU (II) compounds with dicarboxylic acids, USSR study, 14252
scattering and bremsstrahlung cross-section measurements, 9811
stopping power and range tables, 5192
synchronous altitudes, trapped radiation environment models, 8437
temperature determination from X-ray continuum radiation emitted from high temperature plasmas, 11681
temperature variations in exhaust of magnetoplasma dynamic arc, Langmuir probe analysis, 18047
transmission through thick silicon targets, 11498
Electrooptics:
electro-optic light modulators, 1489
properties, 11487
Electrophoresis, improved continuous electrophoresis apparatus, application to study of petroleum, 9764
Electrorefining, *see* Smelting.
Electroshock therapy:
electroanesthesia and electrosleep in man and animals, USSR book excerpts, 15396
electrosleep and electroanesthesia (electroanesthesia), USSR articles, 8256
treating neurodermatitis patients with electrosleep and hypnosis, USSR excerpt, 17874
Electrosleep, *see* Electroshock therapy.
Electrosorption, desalination by electrosorption and desorption, 6445
Electrostatics:
static electricity of polymers reduced by treatment with iodine, 14411
test instrumentation evaluates hazards in fluid system, 11474
Electrothermic equipment, processes and apparatus of vacuum electrothermy, USSR study, 12720
Electrothermics:
electrothermal method for producing aluminum and its alloys, history, USSR study, 12719
vacuum electrothermy, processes and apparatus, USSR study, 12720
Electrowinning, *see* Electrolysis.
Elementary education:
aid to strengthen and improve educational quality and opportunities, administration of programs, notes and working papers, 10865-867
elementary and secondary education act—amend rel. to bilingual education, hearings, 15170, 16321

- Elementary education—Continued
 elementary and secondary education act—
 continued
 amendments of 1966—
 administration of programs, notes
 and working papers, 10865-867
 law, 462
 amendments of 1967—
 hearings, 7742, 9153, 12419, 17664
 reports, 9118, 10557
 handicapped children, State plan pro-
 grams guidelines, 10933
 PACE, projects to advance creativity in
 education, supplementary centers and
 services, etc., 2189, 7915, 10940-941,
 17723
 profile, 9406
 title 1—
 annual report, 7890
 grants, application forms, instruc-
 tions, 16503
 school year 1965-66, highlights, 15218
 staffing for better schools, 16511
 title 2, grants, guidelines, 16513
 ESBA amendments, what's new, 6198
 planetarium, elementary-school teaching
 resource, 5278
 public elementary and secondary day
 schools, pupils, teachers, etc., fall 1966,
 statistics, 7896
 Elements (chemical), *see* Transition elements.
 Elenowitz, Leonard, cooperative ventures in
 urban America, 14187
 Elevators, *see* Altitude.
 Elevators, freight, safe practices, chart, 9727
see also Grain elevators.
 Eley, Cleveland P., floriculture and orna-
 mental horticulture, marketing, etc., 7885
 Elias, Z. M., duality between problems of
 stretching and bending of plates, 5186
 Ellsha Kane (USN oceanographic ship),
 general information, 14568
 Elk, population, Yellowstone National Park,
 control, hearings, 10803
 Elk County, Pa., waterflood, Kane sand,
 Kane oilfield, theoretical and field per-
 formance, 9769, 12814
 Elk Creek, Pa.:
 harbor, improvement, engineer report—
 departmental edition, 4731
 document edition, 4473
 Elkhorn Mountains, northern, geology and
 igneous petrology, 2367
 Elkin, Robert, analyzing time, costs, and
 operations in voluntary children's institu-
 tion and agency, 7231
 Elkins, Douglas A., economic and technical
 evaluation of magnesium production meth-
 ods, carbothermic, 11376
 Ellender, Allen J., review of U.S. Government
 operations in Latin America, 7770
 Eller, Charles:
 agar concentration in counting clostridium
 colonies, 17346
 recovery of clostridia from human feces,
 4182
 Elliott, Carl V., relief, 300, 788
 Elliott, Joseph W., effects of age, etc., on
 characteristics of salmon fingerlings, 8042
 Ellipsoids, stress determination in rock-
 burst-prone area, Galena mine, Wallace,
 Idaho, 14351
 Ellipticity, minimum-impulse time-free trans-
 fer between elliptic orbits, 1432
 Ellis, William B., nomination, hearings, 6094
 Ellis County, Okla., soil survey report, 8703
 Ellis Island:
 commemorative medals—
 law, 394
 report, 899
 Elm, *see* Dutch elm disease.
 Elm bark beetles, *see* Beetles.
 Elm spanworms, *see* Spanworms.
 El Paso, Tex.:
 Chamizal boundary, border highway—
 law, 499
 reports, 630, 701, 904
 land conveyance—
 hearing, 721
 law, 471
 report, 682
 El Real, Darien Province, Panama, environ-
 mental survey, 8895
 El Salvador:
 amateur alien radio operators, authoriza-
 tion to operate, agreement, 17242
 mineral industry, minerals yearbook chap-
 ter, 14331
 Elton, Raymond C., determination of elec-
 tron temperature from X-ray continuum
 radiation emitted from high temperature
 plasmas, 11681
 Elutriation, method for determining specific
 surface of dry chemical fire-extinguishing
 powders, 11678
 Elva L. (ship):
 documentation with full coastwise priv-
 ileges, hearings, 745
 Ely, Nev., mining district, distribution of
 gold, silver, tellurium, and mercury, 9564
 Elz, Dieter, European Economic Community
 import demand for oilseeds and oilseed
 products, 4701
 EM series, 2211, 10956, 12475, 13979
 Embassies, *see* Foreign Service.
 Embolism:
 cerebral air, basic studies, 12793
 intermittent venous occlusion, and mus-
 cular exercises, possible preventive ef-
 fects on cardiovascular deconditioning
 after bed recumbency, study, 8408
 Embree, Ruth G., Pacific area, PACAF basic
 bibliographies for base libraries, 10229
 Embrittlement, *see* Fracture of metals.
 Emergencies, *see* Disasters.
 Emergency boards:
 reports—
 Long Island Railroad Company, 13966
 National Railway Labor Conference,
 9415
 Pan American World Airways, Inc.,
 4724
 Emergency broadcast system, *see* Warning
 systems.
 Emergency evacuation tests of crashed
 L-1649, 10321
 Emergency health service, 11732
 Emergency Planning Office:
 appropriations, 1968—
 hearings, 9145, 15147
 reports, 10600, 15131
 assistant director, nomination of Endicott
 Peabody, hearing, 9305
 director, nomination of Daniel Price,
 hearings, 17639
 mobilization programs, hearing, 12185
 press releases, 3717
 report concerning forest and grass fires,
 10702
 print as Senate document, report, 10783
 Emergency services, service of community
 mental health center, 5429
 Emerson, J. A., irradiation preservation of
 fresh-water fish and inland fruits and
 vegetables, 1784
 Emerson, K. C., Carriker on Mallophaga,
 posthumous papers, catalog of forms de-
 scribed as new, and bibliography, 15599
 Emery, K. O.:
 Atlantic Continental Shelf and slope of
 United States, 4889
 seismic reflection profiles along drill holes
 on continental margin off Florida, 15311
 Eminent domain:
 farm acquired to replace one transferred to
 agency having right of eminent domain
 eligible for cropland adjustment pro-
 gram, report, 15087
 highway relocation assistance study, 16340

INDEX 1967

Emission:

air pollution, community, rapid survey technique for estimating, 7062
resonant, secondary, process reduces in electronic components, 6539
spectrography determines trace levels of metallic corrosion, 6850
thermionic scanner pinpoints work function of emitter surfaces, 1449
vehicle, control, progress (address), 2836
see also Thermionic emission.

Emission spectra, *see* Spectra.

EMIT (electromagnetic izmeteritel'tekhnika), *see* Electromagnetic current meter, Emission:

measuring absorbance and emittance by using cyclic incident radiation, 6792
monoenergetic X-rays from alpha emitting isotopes, generation and use, 4234
Emmerich, W. S., vacuum switchgear, survey, 8440

Emotions:

man under conditions of space flight, analysis of intonational characteristics of speech as criterion, 6507
troubled employees, recognizing and supervising, 14871

Empey, LaMar T., alternatives to incarceration, studies in delinquency, 10135

Emphysema:

cigarette smoking effects, 5424
pulmonary, rehabilitation manual, 14619
special report, 15712

Empididae. *see* Flies.

Empire of Ethiopia, *see* Ethiopia.

Empirical equation relating fatigue limit and mean stress, 9878

Employ the Physically Handicapped Week, National, *see* National Employ the Physically Handicapped Week.

Employed mothers, *see* Mothers.

Employee benefit plans:

code of Federal regulations, 11036
fringe benefits from State minimum wage laws and orders, 5598
metropolitan areas, 1965-66, wages and related benefits, 5056, 14284, 16814
private, coverage, contributions, benefits, 8689
welfare and pension plans disclosure act, questions and answers, 14278

Employee pensions, *see* Pensions.

Employee Rights Board, establish, report, 15121

Employee training:

Federal legislative employees, training opportunities, report, 16232
Government employees training act, amend to include officers and employees of Senate and House, hearings, 16431
how to train workers on the job, 5718
on-the-job training, employer's guide under manpower development and training act, 13278
on-the-job training under cold war GI program—
hearings, 10859
law, 16133
report, 10792
Operation Late Start, how on-the-job training gives new hope to older workers, 16791

Employees:

earnings and hours—
retail trade, 8302, 11332
South and North Central regions, non-metropolitan areas, 15447
South, metropolitan areas, 5071
nursing and personal care homes, number, work experience, etc., statistics, 7098
recording employee injuries, 9714, 16805
troubled, recognizing and supervising, guide, 14871

Employees—Continued

see also Farm labor—Government officials and employees—Railroad employees—also names of departments, etc., where employed.

Employees' Compensation Appeals Board, decisions, July 1, 1965-June 30, 1966, 7920

Employees Compensation Bureau:
computations of disability compensation, savings attainable through improved control, GAO report, 14156

Federal employees' compensation act, disability compensation payments under amendments, GAO review, 2347

procedures for preventing payment of dual benefits for same disability, etc., GAO review, 12592

prompt adjustment in compensation payments to injured Federal employees from total to partial disability rates, GAO report, 4870

Employers:

employer-employee relationship in agriculture—
sharecropping arrangements or landlord-tenant agreements under fair labor standards act, guide, 13176
where crops are used for rental payment, 7223

expenditures for supplementary pay for nonproduction employees, 6620
guide to on-the-job training under manpower development and training act, 13278

household workers, social security tax guide, 2401
how to keep time and pay records under fair labor standards act, 8786

job rights of National Guardsmen, reservists and their employers, 14714

records kept under fair labor standards act, 13179
general requirements, 11899

social security, establishment reporting plan, 1604

Virgin Islands, Guam and American Samoa, Federal social security tax guide, 2402

Employer's Liability and workmen's compensation:

administrative organization, and cost of administration, 1358
disability compensation computations, savings attainable through improved control, GAO report, 14156

Federal employees' compensation act—
disability compensation payments under amendments, GAO review, 2347

dual benefits for same disability or death, preventing payment, GAO review, 12592

payment to injured employees, prompt adjustment from total to partial disability rates, Employees Compensation Bureau, GAO report, 4870
work injury benefits, 13967

longshoremen's and harbor workers' compensation act, extended, regulations governing administration, 1019, 4726

nonappropriated fund instrumentalities act, regulations for compensation, 1018

publications, price list, 17135
radiation workers, grants for record-keeping system, hearings, 1974

State compensatory provisions for occupational diseases, 8337

State laws, comparison of major provisions with recommended standards, 5046

State workmen's compensation laws, summary, 9696

when injured at work, Federal employees guide, 7921, 15219

Employer's liability and workmen's compensation—Continued
workmen's compensation payments and costs, 2867

Employment:

act of 1946—

amend, hearings, 2133

amendments of 1965, hearings, 2133

how well is it achieving its goal?, seminar on manpower policy and program, 5043

text, etc., 10492

age discrimination, prohibit hearings, 9325

American, impact of imports, procedures to relieve, hearings, 16323

area trends in employment and unemployment, 3039

Army Materiel Command, bulletin, 13305

building communities with new jobs, 2159

census of mineral industries, 1963, industry statistics, 7469

city, 7493, 10381

coal mines, monthly report, 3098

community action, 2166

counselors, interviewing guides in individual appraisal and counselee appraisal

patterns related to fields of work, handbook, 7922

disadvantaged young men, they need to learn, can you help Job Corps train them, 7873

EDA program—

building communities with jobs, 13928

address, 17708

employment and earnings, and monthly report on labor force (periodical), 3232

employment situation, monthly release, 3239

engineers, scientists, and technicians, current market, 4727

Equal Employment Opportunity Commission reports, clearinghouse service for business newsletters, etc., 12481

expanding job choices through education and training, 9578

farm labor developments, 3264

employment and wage supplement, 3265

Federal—

employment of women (periodical), 3280

employment statistics bulletin, 3281

equal opportunity, 1927

mentally retarded, 1560

2d look, progress report, 16083

monthly report, 3578

travel expenses of applicants, hearing, 17602

working for U.S.A., 14869

Forest Service, nonprofessional jobs, guide, 10184

fuel industries, minerals yearbook chapter, 2536

Government employment series, 7493-94, 10381

governmental finances and employment, 1966, chart book, 1881

handicapped—

employment assistance, Federal and State program, directory, 15664

unparalleled opportunity (addresses), 8616A

workers, challenge of employment barriers, 1968 report theme contest, 11th and 12th grade students, announcement, 15667

homeworkers in industries under fair labor standards act, 15819

is there a job in your future? Job Corps information, 4687

job creating programs, EDA economic development districts, 9380

job redesign for older workers, 10 case studies, 8303

joint, relationship under fair labor standards act, 13178

Employment—Continued

local law enforcement agencies, Secretary of Labor to collect data, etc., hearings, 16325

major programs providing Federal funds for employment and training, 17416

manpower and employment statistics, 15452

manufacturing, by counties of U.S., 1960, map, 1890

Memphis-Shelby County, Tenn., civil rights report, 14851

mentally-restored applicants, interviewing guide for counselors, 10944

metal and nonmetal industries, minerals yearbook chapter, 8338

military retirees as civilians with Air Force, law, 5697

mineral industries—

minerals yearbook chapter, 2537

survey, 8342, 15465

minority group, in Federal Government, 1930

National Park Service, seasonal, 8562

Negro's occupational progress, 16829

Negroes, success, 15223

nonagricultural industries, measurement, 15825

now, about that job, A B C's for veterans, 14715

opportunities—

Naval Air Systems Command, 3234

Naval Ordnance Systems Command, 3235

Naval Weapons Bureau, 3236

Sport Fisheries and Wildlife Bureau, 14056

Pacific Northwest forest industries, 3774

President's Committee on Employment of the Handicapped, wards and recognition program, 1355

professional, technical and kindred occupations by counties of U.S., 1960, map, 1891

projections 1970, industry, 2508

public, 7494

returning disabled Vietnam veteran (remarks), 18143

safety standards in D.C., amend law—

hearings, 16320

report, 16296

scientific, professional, and technical personnel in State governments, 15450

seasonal, range, forestry, surveying, engineering, fire control, information, 2524

self-employed individuals, pension, annuity, etc., income tax, 9596

self-employed people, reporting their income, social security information, 2861

services for veterans, 1020

sheltered, meaning and aims for handicapped people (remarks), 11700

sheltered workshops, pathway to regular employment, 6593

shoe industry, increasing, 2161

State and local government employment and payrolls, 3894

statistics, 1909-66, United States, 2496

statistics, 1939-66, States and areas, 14283

students—

special minimum wages while full time, 7229, 18251

summer jobs and how to find them, 10947

testing procedures, guidelines, 2227

textile jobs of non-whites in North and South Carolina, etc., opportunities, 13994

USSR civilian employment, 1950-75 estimates and projections, 12090

veterans, Veteran's Employment Service will help you start or resume career, here are facts, 15220

where will you go when the go-go's gone?, information for girls, 8797

Work Programs Bureau activities, 17297

INDEX 1967

Employment—Continued
 worker attitudes in job seeking, 1021
 workers covered by State unemployment insurance laws, 3233
see also Discrimination in employment—
 Farm labor—Government officials and employees — Handicapped — Labor—
 Manpower—Women—Work.
 Employment of the Handicapped, President's Committee on, *see* President's Committee on Employment of the Handicapped.
 Employment security activities, *see* Unemployment Insurance.
 Employment Security Bureau:
 BES series, 6199-6200, 12471, 17727
 internal audits, to correct conditions disclosed, more effective action, GAO report, 4869
 local offices, directory, 13970
 MDTA handbook, 15221
 publications, 6201
 State employment security agencies, Georgia employment security agency, ensure salary comparability, procedures, need for strengthening, GAO report, 8134
 Employment Service:
 employment service review, 3237
 slides and films, 12472
 statistics (periodical), 3238
 Employment taxes:
 Federal unemployment taxes, benefits from quarterly collection, Labor and Treasury Depts., GAO review, 8135
 increase unemployment tax rate, summary of Senate amendments to bill, 2115
 IRS looseleaf regulations system, 2407, 3527, 6457, 9598
 Emulsified fuel, feasibility of burning in gas turbine engines, 11998
 Enactment of law, procedural steps in legislative process, 13720
 Enamel:
 coal-tar, synthetic resin primer, 10073
 copper-acrylic, serves as lubricant for cold drawing of refractory metals, 5140
 Encapsulation (electronics), *see* Electronic equipment.
 Encephalitis, reported incidence of arthropod borne encephalitis of equine in United States, 1965 calendar year, 7255
 Encephalography, *see* Electroencephalography.
 Encephalomyelitis, allergic demyelinating, USSR biochemical and histochemical studies on nerve fiber proteins, 14213
 Encke, AIC 57C, lunar chart, 7323
 Encoders, evolution of satellite PFM encoding systems, 5241
see also Analog-to-digital converters.
 Enders, Lawrence J., aortic insufficiency in flying personnel, 17348
 Endocrinine, *see* Endocrinology.
 Endocrinology:
 Rumanian contribution, 14260
 Rumanian, new horizons, 14216
 seasonal changes among endocrine-metabolic indices of men residing in subtropical climate, 7358
 tumors of endocrine glands, 2841
 Endrin, and carbon tetrachloride, comparison of acute effects on livers of rats, 4252
 Enemy property, interests vested under international claims settlement act, return, hearing, 732
 Energy, *see* Atomic energy—Electricity—
 Force and energy—Radiant energy.
 Energy metabolism, *see* Metabolism.
 Energy resources, *see* Power resources.
 Energy spectrum, *see* Spectra.
 Energy storage, solidification in thermal-energy storage systems with axisymmetric heat-transfer solutions, analysis, 5246
 Enforcement of law, *see* Law enforcement.
 Engel, Arnold, osteoarthritis in adults, 5468
 Engel, George T., tin, 2591

Engelke, W. T.:
 thermal and mechanical properties of non-degraded and thermally degraded phenolic-carbon composite, 16917
 thermophysical properties of low-density phenolic-nylon ablation material, 14377
 Engelmann spruce, *see* Spruce.
 Engineered performance standards:
 machine shop, machine repairs formulas, 17067
 public works maintenance, electric, electronic handbook, 14567
 roads, grounds, pest control, handbook, 11625
 Engineering:
 and science, fact and fiction (address), 243
 Army aviation maintenance manual, 4218, 7400, 8892, 10282
 aspects of control system design via direct method of Liapunov, 5165
 Communist Chinese abstracts, 3120
 computer-aided teaching of dynamic system behavior, 62
 computer—
 education problems, 1321
 railroad transportation, USSR study, 1173
 computerized parts list system coordinates engineering releases, parts control, and manufacturing planning, 17929
 conservation practice standards, SCS national engineering handbook, 13122
 cotton gin operations, engineering aspects in Midsouth, west Texas, and Far West, 12452
 course and curriculum improvement projects, 5324
 defense communications system, installations standards manual, 4668, 16455
 degrees (1964-65), and enrollments (fall 1965), 13953
 design handbook series, 1750-51, 10252, 15928
 East European abstracts, 3222
 engineering monographs, 2847, 5479, 13103, 17178
 environmental, research grants, 5463
 exposed of numerical integration of ordinary differential equation, 1503
 fatigue failure of aircraft structures, 17062
 Federal careers, examination announcements, 1924, 5933, 17459
 geology of Air Force Academy site, Colo., 11179
 highway safety study, Operation 66, joint engineering-enforcement project report, 1594
 James Millholland and early railroad engineering, 11602
 journal of research, National Bureau of Standards, 3460
 machine for calculations, USSR study, 1214
 maintainability, research and development of material, 103
 manpower, employ systems engineering and systems analysis to utilize nation's manpower resources, etc., hearings, 4652, 10869
 observations on MR-5 aircraft fire-fighting and rescue vehicle, 9099
 oceanography and engineering (address), 12116
 opportunities—
 bridge to your success in Public Roads Bureau training program, 18192
 college students in Public Road Bureau, 1593
 PACAF basic bibliography, 13266
 Parkfield, Calif., earthquake, report, 1934
 power engineering trends in Latvian SSR, 1235
 prospective manpower situation for science and engineering staff in universities and colleges, 14563

Engineering—Continued
 public health engineering abstracts, 3781
 publications, price list, 17134
 quarterly engineering seismology bulletin, 3793
 Reclamation Bureau, Engineering and Research Center in Denver, 11768
 refractory compounds and their role in engineering, USSR study, 4960
 research progress, Reclamation Bureau, annual report, 11775
 rewarding career with United States Post Office Department, 7042
 seasonal employment information, 2524
 sciences, research objectives, 1967, OAR, 7338
 SCS national engineering handbook, 10087, 14652
 Soviet patents, 9628, 9648
 spacecraft cabin atmosphere selection, criteria, 16912
 submarine engineering administration, training aid, 11664
 Syncom report, 10558
 technician, examination announcement, 1910
 trainees for vacation work-study programs, examination announcement, 17460
 USSR abstracts, 4029
see also Civil engineering—Electric engineering—Environmental engineering—Hydraulic engineering—Marine engineering—Mechanical engineering—Methods engineering—Naval engineering—Nuclear engineering—Radio engineering—Solar engineering—Value engineering.
 Engineering aids:
 examination announcement, 7545
 3 & 2, Navy training course, 2775
 Engineering draftsmen, *see* Draftsmen.
 Engineering equipment:
 Communist Chinese abstracts, 3120
 East European abstracts, 3222
 USSR abstracts, 4029
 Engineering Laboratory, TVA, research, in fields of civil engineering, mechanical engineering, instrumentation, 1260
 Engineering psychology, *see* Human engineering.
 Engineering technicians, examination announcement, 13445
 Engineers:
 and their education in changing society (remarks), 17402
 architect-engineer fees, Government-wide administration of certain statutory and regulatory requirements, GAO review, 9548, 16668
 Belorussian, more needed to train specialists in microelectronics and bionics, 1271
 brain drain into United States, staff study, 15029
 civilian career opportunities on engineering team of Coast Guard, not for the ordinary engineer, 215
 computer language, attempts to free from need to master, USSR study, 5020
 construction, contracting services for AEC work, guide, 13350
 current employment market, 4727
 design, changes in Patent Office and patent procedures (address), 10020
 employment in industrial research, etc., 1965, preliminary report, 5325
 engineers from abroad, 1962-64, as immigrants, educational exchange students, etc., 9968
 examination announcement, amdt., 10410
 improving calibre of engineering personnel, USSR study, 16782
 non-research positions only, examination announcement, amdt., 205
 nuclear defense design courses, announcement, 16053
 pay, national, survey, 2507

Engineers—Continued
 Soviet, reply to questions on role of their specialties in scientific and economic development, 6561
 study brain disease effects on recognition capacities for use in computer development, USSR study, 6488
 women, why not be an engineer?, 11913
see also Bridge engineers—Civil engineers—Corrosion engineers—Electronic engineers—Flight engineers—Highway engineers—Metallurgical engineers.
 Engineers Corps, Army:
 amphibious units, field manual, 4204
 construction bids, quantity estimates prepared for solicitation, GAO review, 14152
 dredging contracts, policies and procedures, GAO review, 14154
 flood control, rivers and harbors, new projects and monetary authorizations—law, 493
 report, 698
 law regarding deposition of industrial waste solids into navigable waters, need for improving procedures to ensure compliance, GAO report, 4868
 manuals, 2211, 10956, 12475, 13979
 oil interests, acquiring, procedures to preclude more than just compensation, GAO report, 16670
 planned Federal contribution toward cost of State-constructed Del Valle Dam and Reservoir, Alameda County, Calif., GAO review, 6384
 press releases, 3718
 publications available for purchase, 13981
 publications list, 13978
 regulations, ER series, 6206, 15226, 17735
 report 1966, civil work activities—departmental edition, 16518
 document edition, 16151
 safety, general requirements, manual, 10956
 southeastern Federal power program financial statements, 1966, GAO examination, 15296
 technical services, in war against Japan, 5096
 your work in Corps of Engineers, pamphlet for civilian employees, 1031
 Engineers Corps Board of Contract Appeals digest of decisions, 7926
 Engineer's digest (periodical), 3240, 17468
 Engines:
 accessories, Federal item identification guides for supply cataloging, supplements, 3285
 engines and components, Federal item identification guides for supply cataloging, supplements, 3285
 internal combustion engines—current industrial reports, 5866, 6940
 operation and maintenance, 13017
see also Rockets—Turbines.
 Engines (aircraft):
 aircraft engine oil components, identification, use of thin-layer chromatography (TLC), 11674
 airworthiness standards, Federal aviation regulations, 7947, 10989
 Army aviation maintenance engineering manual, 10282
 current industrial reports, 3169, 13389
 cylinder pressure variation, indicator system provides complete data, 5200
 jet, static calibration of ejector unit for simulation in small-scale wind-tunnel models, 6899
 M-1 engine components, alloy 718 application, 12862
 turbojet, having choked inlet flow, performance measurement, inlet flow characteristics, and radiated noise, 11499

INDEX 1967

Engines (aircraft)—Continued
type certificate data sheets and specification, 3017
see also Rockets.
England, *see* Great Britain.
English Channel, lights and fog signals, list, 5384, 11644
English language:
English and Government, Federal textbook on citizenship, 14190, 17844
instruction, financial assistance guidelines under NDEA, 13956
national defense education act—
institutes for advanced study, summer 1967, handbook for directors, 1003
loans to private nonprofit elementary and secondary schools for equipment and materials, 1007
requirement of immigration and nationality act, change exemption, hearing, 7751
teaching forum, facts and ideas for teacher of English as foreign language, 5577
Engvall, John L., engineering exposé of numerical integration of ordinary differential equations, 1503.
Enlisted Evaluation System, 17381
Enlisted men, *see* Coast Guard—Navy.
Enlisted ratings qualifications manual, 14876
Enns, Philip H., criminal victimization in U.S., 13059
Enolase, substrate protection mechanism against ionizing radiation, studies, 14774
Enriching community life, Federal assistance program for neighborhood facilities, 2380
Enrico Fermi reactor, *see* Reactors (atomic).
Enrollment, *see* Colleges and universities—Schools.
Enterococci, enteric microbial flora of man in oxygen-hellum atmosphere, 79
Enterprise statistics, 1963, preliminary reports, 3241
Entocythere, *see* Crustaceans.
Entocytheridae, *see* Crustaceans.
Entomacrodus, genus, circumtropical shorefish, revision, 11604
Entomologists, examination announcement, amendment, 8985
Entomology:
All-Union Entomological Society of Academy of Sciences, USSR, activities, report, 2471
Czechoslovakia, research, main centers and principal achievements, 2472
4-H club leaders' guide, 4134
Entropy:
absolute entropies prediction from gas chromatographic retention data, 18111
relationship of entropy and quantity of information, USSR study, 14247
Entry into atmosphere, *see* Atmospheric entry.
Environment:
accident, low-level radioactive waste containers, investigation, 8909
achievement of thermal balance and its maintenance during environmental stress, 1822
aircraft, respiration rate transducers, development, 18044
aqueous, titanium, etc., alloys, crack propagation, delayed failure, and residual static strength, 6872
closed system, trace contaminants contained in samples at 253 mm. Hg, analysis, 10234
cold regions science and engineering, 1756, 14793-794
control—
environmental aspects of hospital, safety fundamentals, 15690
health protection, target of Bureau of Disease Prevention and Environmental Control, 11734
deuterium, cytology advanced by studying effects, 16881

Environment—Continued
environmental characteristics of tunnels in South Vietnam, 15229
environmental sciences, research objectives, 1967, OAR, 7336
environmental test methods, military standard, 16469
fecal coliforms, sanitary significance, 6343
health series—
air pollution, 1572, 5428, 7062-63
Arctic health, 14623
radiological health, 7064-65, 8630, 10047, 11725, 15681-682, 17140
urban and industrial health, 15683-684
heat exchanger tubes supported in high vibration environment, 5220
low pressure, indirect calorimetry, 11957
meteoroid, near-earth, 1512
natural environment radioactivity from radon 22, 17140
natural, of satellite in synchronous circular orbit, 15883
near-space environment, 11575
oxygen at 210 mm. Hg absolute, effects on rats, 1740
Pegasus thermal design, 1477
evaluation, 2687
phenolic nylon, effect on ablative performance, 9389
pure oxygen, low-pressure, rats born and raised in, energy metabolism, 5709
radiation surveillance, 10048
science and improving our environment, 14738
sealed, microcontaminant studies, infrared spectrophotometry utilization, 8869
simulation, effectiveness of testing for spacecraft, 11549
space environments—
biological effects of protons, estimate, 4176
microbially controlled, NASA standards for clean rooms and work stations, 15522
simulated, effects on thermal radiation characteristics of black coatings, 16980
simulated, explosive cutting in, 8466
trace constituents of closed ecological system, delineation program, 7369
strategy for livable environment, 12622
surface mining and our environment, special report, 14201
survey in El Real, Darien Province, Panama, 8895
testing, contaminant producing materials from integrated life support system, 11416
thermal, and temperature history of lunar orbiting space vehicles, computer program to determine, 16951
trapped radiation environment models, 8437, 16929
vacuum—
improved rolling element bearings, 6835
screw-seal performance, 6855
Venus and Mars, advanced manned planetary mission programs, nominal natural environment, establish numerical values, 8436
Environmental control systems, *see* Control systems.
Environmental Data Service, ESSA technical memorandum, EDSTM series, 6219-22
Environmental engineering, space-cabin atmospheres, engineering trade-offs of 1-vs. 2-gas systems, literature review, 12879
Environmental Engineering and Food Protection Division, research grants, 5463
Environmental health, *see* Health.
Environmental Research Institutes, *see* Institutes for Environmental Research.
Environmental safety, *see* Safety of life.

Environmental Science Services Administration:
Boulder, Colo., facilities, general information, 16097
deputy administrator, nomination of
Werner A. Baum, hearing, 6095
ESSA world, official employee publication, 3243
group life insurance program, annual report, 8778
Institute for Oceanography, programs and mission, 16537
members serving with Air Force, provide same status as those serving in Army and Navy—
law, 380
report, 888
monograph, 4747
press releases, 3719
professional papers, 15230
program decisions (address), 7937
research for successful exploitation of sea's resources, 10970
satellite programs, 1033
technical memorandums, 6219-22, 7935, 9427-29, 10964-966, 12479, 15231, 16532
technical reports, 2223-25, 4748, 6223-25, 9430, 10967-968, 16533
Enz, Richard W., water supply outlook and Federal-State-private cooperative snow surveys for Arizona, 4044
Enzler, Jared, revised indexes of manufacturing capacity and capacity utilization, 14045
Enzymes:
clearing and staining small vertebrates, 11605
selected blood response, man in oxygen-hellum atmosphere, 85
see also Dehydrogenase.
Ephemérides:
American ephemeris and nautical almanac, 2768, 6995
ephemeris of sun, Polaris, and other selected stars, 17902
Epicampes, see Muliensbergia.
Epicormic branching on 8 species of Appalachian hardwoods, 8078
Epidemics, process concept, defining, USSR study, 9633
Epidemiology:
cerebrovascular disease, workshop papers, 7084
Hygiene and Epidemiology Institute, Bulgaria, organization and tasks, 6497
New Jersey radium cases, follow-up, progress report, 10301
reports from world press, 3242
stroke, study, 11726
Epilepsy:
NYC enrollees, project sponsors guide to placement, 2488
progress in research, 18182
Epoxy resins, see Resins.
Epperson, W. L., man in oxygen-hellum environment, heat exchange, 81
Epstein, Anita G., Upper Silurian and Lower Devonian stratigraphy of northeastern Pennsylvania, New Jersey, and southeasternmost New York, 11167
Epstein, Lenore A., aged population of United States, 1963 social security survey, 13120
Equal employment opportunity, see Discrimination in employment.
Equal Employment Opportunity Commission:
annual digest of legal interpretations, 12480
annual report, 9064
appropriations, 1967, law, 501
appropriations, 1968—
hearings, 10632, 16390
reports, 10616, 16372

Equal Employment Opportunity Commission—Continued
authority to issue enforceable cease-and-desist orders, message from the President, 12199
EEOC reports, clearinghouse service for business newsletters, etc., 12481
legal interpretations issued or adopted by, digest, 3205
member, nomination of—
Alexander, Clifford L., Jr., 17667
Shulman, Stephen N., hearing, 9327
Ximenes, Vincente T., hearing, 10863
newsletter, 3633
press releases, 3720
strengthen enforcement powers, hearings, 13877
Equal pay for equal work, see Women.
Equalant III, data report, tropical Atlantic Ocean, 8569
Equations:
asymptotic behavior of solutions of boundary problems for quasilinear differential equations, 11573
balance equation, use in tropics, 9429
canonical, determination of regularity of automaton, 6581
class of n^{th} order nonlinear differential, Lyapunov functions, 5180
computer program VARI-QUIR III provides solution of steady-state, multi-group, 2-dimensional neutron diffusion equations, 17927
depletion, one-dimensional spatial calculations for VULCAN (digital computer program), 16990
differential—
axisymmetric vibration of paraboloidal shells of revolution, 17546
multistep methods, stability theory, 11523
numerical integration, engineering exposed, 1503
numerical solutions stability, 5243
ordinary, numerical integration by new Lie series method, 9877
solved by computer program simulating physical systems, 15526
empirical equation relating fatigue limit and mean stress, 9878
for application of wind-tunnel wall corrections to pitching moments caused by tail of aircraft model, 2715
integral, method in plane elasticity, 9819
integration of control equations and problem of small time constants, 8505
linear, algebraic, simultaneous, computer subroutine ISUDS accurately solves large system, 17026
linear differential, theory, asymptotic methods, 12976
Lyapunov functions from auxiliary exact differential equations, 11421
modified quasilinearization concept for solving nonlinear 2-point boundary value problem, 12941
multivariate regression for predicting volumes of 4 Hawaii hardwoods, 8084
nonlinear—
incremental procedure solution applicable to plates and shells, 2727
magnitude of nonlinearities in collisionless magnetoplasma waves, 5253
problem of transient cooling of opaque sphere in space, theoretical solution, 14458
regression and principle of least squares, evaluating constants and calculating variances and covariances, 6681
vibration and buckling of prestressed shells of revolution, 6878
ordinary differential, finite difference methods, for numerical integration, operational unification, 11559
plasma stability and Bohr-van Leeuwen theorem, 8495

INDEX 1967

Equations—Continued
 policy-capturing model, applied to selecting a harem, 15893
 provide tabular information on effects of uniform and variable loads on thin, flat, circular plates, 8399
 Rammonde, test for snow hardness, reevaluation, 1755
 Runge-Kutta, approximate solutions, 15563
 Schrödinger, numerical solutions, accurate and stable, 17090
 simplified prediction, for NRL satellite position display, 5349
 space vehicle flight control systems, analysis and design—
 elastic body, 15503
 trajectories, 12872
 stand volume equations for shortleaf pine in Missouri, 14094
 study compares methods for numerical solution of ordinary differential equations, 1468
 thermodynamic properties of fluids, including 2-phase region, calculating from empirical equation of state, 9776
 thermoelastic and viscoelastic cylindrical sandwich shells, 1436
 transport, radiant energy in nongray, non-scattering gases, approximation, 11544
 van der Waals fluid in 2-phase region, thermodynamic properties, 11379
 vector integral equations, applications to terrain, 7935
see also Mathematics.
Equations of motion:
 rigid-body motion extracted from total motion of flexible body, 9845
 spacecraft arbitrary rotating motion, approximate solutions, 18054
 transient blade motions of rotor with flapping and lead-lag degrees of freedom, numerical method for studying, 17010
Equations of state:
 fluids, thermodynamic properties calculated from empirical equation of state, 9776
 helium-nitrogen mixtures, 8374
 Equatorial Guinea, *see* Fernando Pó—Rio Muni.
Equilibrium:
 analysis and its application to attitude control systems, 14499
 carbonate-bicarbonate, research, USSR study, 1250
 chemical equilibria in complex systems, computer program determines, 6828
 composition of air, equations for rapid machine computation, and derivatives for flow-field calculations, 16973
 dissociating air, stagnation-point boundary layer with suction and injection, 8499
 thermochemical, isentropic flow solutions for reacting gas mixtures, 16979
 thermodynamic, computer program for determining chemical composition of physical system, 9825E
 thermodynamic in prebiological atmospheres of C, H, O, N, P, S and Cl, 11426
 thermodynamic properties of high-temperature nitrogen seeded with alkali-metal vapor mixture, 16974
Equilibrium (physiology):
 function of primates, effects of pulsed ionizing radiation, 7354
 Equine encephalitis, *see* Encephalitis.
 Equine infectious anemia, *see* Anemia.
 Equine piroplasmiasis, *see* Piroplasmiasis.
 Equipment operators, and repairmen, examination announcement, 12102
 Equipment specialists, examination announcements, 1911, 14854

Equipments, *see* Aeronautical supplies—Air purification equipment—Dental instruments and apparatus—Handling equipment—Hospital apparatus and supplies—Medical instruments and apparatus—Military supplies—Veterinary instruments and apparatus.
Equity:
 corporate equity ownership of securities under securities exchange act of 1934, full disclosure—
 hearings, 13848
 report, 15133
 in pursuit of equity, who serves when not all serve?, report of National Advisory Commission on Selective Service, 7045
 Equivalent circuit for field effect transistor established for computer simulation, 6844
 Erdman, Lewis W., legume inoculation, what it is, what it does, 14739
 Erdmann, Gayne G.:
 chemical weed control in 2-year-old walnut planting, 14098
 promising conifers for western Iowa, 8107
 Erdogan, Fazil, crack propagation theories, 17939
 Erenyi, Gizella, relief, 12223
 Ergodic properties of tracer system, 13337
 Ergometers, *see* Dynamometers.
 ERIC, *see* Educational Research Information Center.
 Erickson, Edwin E., area handbook for Ecuador, 10268
 Erickson, Elmer O., relief, 607, 7627
 Erie Canal, 5-cent commemorative postage stamp (poster), 11692
 Erie, Lake:
 and its tributaries, pollution, 3d meeting, proceedings, 6344
 coast, Cattaraugus Creek Harbor, engineer report—
 departmental edition, 10950
 document edition, 10505
 coast, Conneaut Harbor, engineer report—
 departmental edition, 2208
 document edition, 2000
 coast, Elk Creek Harbor, engineer report—
 departmental edition, 4731
 document edition, 4473
 pollution, conference, proceedings, 16809
 small craft, gale and whole gale warning facilities chart, 14723
 Erlanson, E. P., auxiliary power systems for lunar roving vehicle, 16891
 Erosion, *see* Soil erosion.
 Erosion control, *see* Soil erosion.
 Error-correcting codes, noise-rejection coding of digital teletype communications in complex automatic hydrometeorological telemetering systems, USSR study, 8275
Errors:
 analysis of celestial-inertial navigation for low-thrust interplanetary vehicles, 8424
 atmospheric, in microwave azimuth measurements, experimental study, 2224
 data compression with error-control coding for space telemetry, 11558
 digital system detects binary code patterns containing errors, 2647
 gain measurements in standard electromagnetic horns, 9944
 gas laser, canceled with neon isotopes, 5226
 output pulse timing, modified univibrator compensates, 12834
 rounding bounds by perturbation-condition analysis, 16978
 systematic, in ultrasonic propagation parameter measurements, iterative reflection-interferometry method evaluated, 9983
 ERS, *see* Economics Research Service.
 ERS-foreign series, 990-993, 2174, 4700-1, 7886-87, 9393-94, 10924-926, 12455-456, 13949, 16491-494, 17713

ERS series, 987-989, 2172-73, 4697-99, 6173, 7883-85, 9390-92, 10919-923, 12454, 13944-948, 17712
 Erythrocytes, *see* Blood.
 Erbringer, Heinz, Kalman filtering application to error correction of inertial navigators, 6904
 ESC series, 15668-569
 Escape systems:
 Apollo spacecraft, pitch control motor for launch escape system, qualification evaluation, 15560
 emergency system protects personnel from explosion and fire, 6796
 Gemini, development, etc., 12945
Escapes, see Refugees.
 Escherichia coli:
 comparison of differential agar with Sellers citrate-mannitol-agar, 10233
 potassium transport mutant phosphorus metabolism abnormalities, 10235
 ESD, *see* Electronic Systems Division.
 ESEA (elementary and secondary education act) *see* Elementary education—Secondary education.
 Eskimos:
 Alaska, general information, 2389
 arts and crafts, sources, list—individuals, 12640
 organizations, 12639
 dental health program, 11724
 ethnoarcheology of Crow Village, Alaska—
 departmental edition, 9048
 document edition, 9048
 Eslu, Wallace E., relation of visual estimates of decay to specific gravity loss in stored cottonwood and willow, 2299
 Esocidae, *see* Fish and fisheries.
 Esophoria, acuity and phoria among submariners, longitudinal study, 12791
 Espantoso, Yong Ok, relief, 16184, 17531
 Espenshade, G. H., geology and petrology of Greenville quadrangle, Piscataquis and Somerset Counties, Maine, 16684
 Espinosa, Mario V. Machado, *see* Machado
 Espinosa, Mario V.
 Espionage:
 laws—
 compilation, 1987
 military security, 6934
 ESSA, *see* Environmental Science Services Administration.
 ESSA 3 (meteorological satellite), *see* Satellites.
 Essential services of community mental health center, 5429-30, 11727-728
 Establishment reporting plan, statement for use of employer, 1604
 Estados Unidos de America indicaciones utiles sobre la aduana para los no domiciliados en los Estados Unidos, 13906
 Estate tax, *see* Inheritance and transfer tax.
 Estates, *see* Decedents' estates.
 Estep, Phyllis M., beginning for rural disadvantaged in Louisiana, Project Seesaw, 8284
 Esters:
 lubricants, temperature limitations in ball bearings, 15576
 pinacolic of methylfluorophosphine acid, clinical observations of individuals contaminated, Bulgarian study, 1230
 polyester films, adhesive for bonding, cures at room temperature, etc., 2631
 transesterification of phosphites and phosphinites by monohydric and polyhydric alcohols and phenols, USSR study, 1210
 Estes, Jonnie M., two-constant equation for helium from 30° to 1475° K., 14357
 Estevez, Mario O. Santos, *see* Santos-Estevez, Mario O.
 Estuaries:
 Delaware, comprehensive study, summary of preliminary report and findings, 2272

Estuaries—Continued
 preserve, develop, etc., for sport, recreation, etc.—
 hearings, 4635, 9164
 report, 695
 Etchings of Canaletto, 10080
 Ethanes, shipments, 15484
 Ethers, lubricants, temperature limitations in ball bearings, 15576
 Ethics:
 medical ethics and research, symposium, 18247
 medico-moral ethics for hospital ministry, 15817
 Ethiopia:
 background notes, 8706
 capsule facts for Armed Forces, 11974
 economy, basic data, 7580
 establishing business in, 13465
 housing, basic information, 6417
 labor conditions, 1373
 labor law and practice, 5054
 mineral industry, minerals yearbook chapter, 6649
 parcel post, agreement, 17239
 Ethnoarcheology of Crow Village, Alaska:
 departmental edition, 8872
 document edition, 9048
 Ethnography, *see* Ethnology.
 Ethnology:
 ethnographic study series, minority groups in Republic of Vietnam, 5735
 manpower potential in our ethnic groups, seminar proceedings, 17885
 Soviet, ethnography translations, 8261
 see also Ethnopharmacology.
 Ethnopharmacology, search for psychoactive drugs, symposium, proceedings, 17173
 Ethology, *see* Character.
 Ethylene dibromide, use for fumigation of Mexican fruits, manual, 13203
 Etiology, viruses of human leukemias, recent research, Rumanian studies, 6549
 Eucalyptus, blackbutt, Hawaiian grown, physical and mechanical properties, 2328
 Euechromius, *see* Moths.
 Euclides P., AIC 76 A, lunar chart, 7328
 Eudoxus, LAC 26, lunar chart, 13263
 Eufaula National Wildlife Refuge, general information, 4806
 Eugenie II (vessel):
 documentation with coastwise privileges, report, 10761
 Eulogies, *see* Memorial services.
 Euparixia, *see* Beetles.
 Euphillomedes arostrata, new myodocopid ostracod from Maldiv Islands, Indian Ocean, 6954
 Euphillomedes multichelata, *see* Crustaceans.
 Eureka to Point Conception, Calif., coastal warning facilities chart, 11901
 Europe:
 agricultural situation—
 midyear review, 16491
 1966 review and 1967 outlook, 9394
 civil divisions, geographic report, 11827
 Eastern—
 agriculture, forestry, and food industries, translations, 3954
 building bridges to (addresses), 10099
 doing business with Eastern European countries (addresses), 2416
 East of the Elbe, study mission report, 6104
 economic organization and management, translations, 3959
 electronic and precision equipment industries, translations, 3953
 geodesy and cartography, new developments, Hungarian study, 15358
 hydrometeorological and meteorological services, conference of directors, USSR study, 1179
 machinery industries, translations, 3956
 materials industries, translations, 3957
 military information translations, 3556

INDEX 1967

Europe—Continued

Eastern—Continued

- political translations, 3691
- scientific abstracts, 3217-24
- selected functional bibliography, 15763
- service industries, translations, 3958
- sociological translations, 3882
- United States trade, Communist areas, 16108
- European and British Commonwealth series, 1626, 10099
- health information for travel in, 13079
- markets, quality evaluation of U.S.-grown citrus fruit, 5616
- mineral industry, regional review, minerals yearbook chapter, 15473
- our changing partnership, special study mission, report, 6024
- propagation at 5GHz, comparison of predictions and measurements for various types of paths, 6223
- Russia's Europe, rebellion, fact and fiction, print additional copies, report, 12373
- study mission, 1966, report, 7744
- tide tables, 12120
- unification of East and West for foundation of mutual trust (remarks), 1626
- United States-European relations, study and reevaluation, hearings, 13863
- United States troop deployment to, express sense of Senate, hearings, 13863
- west coast, lights and fog signals, list, changes, 1558, 5353, 11643, 18100
- Western—
 - gas, characteristics and distribution, 16102
 - infant and perinatal mortality in 6 countries, comparison with U.S., 8659
 - manpower utilization at military installations, report, 9133
 - market for gas equipment, 16102
 - market profiles, 13462
 - radioisotopes as power sources, 15416
 - strategic importance, 5914
- European chafers, *see* Beetles
- European corn borer, how to control, 10168
- European Economic Community:
 - agricultural trade, 1959-64, statistical reference, 2174
- Common Market, grain statistics, compilation, 16642
- grain-livestock economy, 1951-63, historical review, 2176
- growth in demand for feed grains, projection to 1970 and 1975 in relation to consumption, 13949
- import demand for oilseeds and oilseed products, summary, 4701
- European Migration, Intergovernmental Committee for, *see* Intergovernmental Committee for European Migration
- European Space Research Organization, satellite telemetry/telecommand station near Fairbanks, Alaska, agreement, 11836
- European War, 1914-18:
 - battle art, exhibition, 8650
 - Marine Corps, annotated bibliography, 14310
 - veterans, *see* Veterans
- Euryhaline copepod genus *Eurytemora* in fresh and brackish waters of Cape Thompson region, Chukchi Sea, Alaska, 6943
- Eurytemora, euryhaline copepod genus, Cape Thompson region, Alaska, 6943
- Eurytoma, *see* Chalcid flies
- Eusectus Hübner, American genus of noctuid moths, 5306
- Eutectics, vacuum chamber remotely sealed by eutectic metal, 11390
- Euxenite, metal values, extraction by fusion with ammonium sulfate or ammonium bisulfate, 6685

Evacuation:

- aeromedical—
 - patients' views of patient care, 17350
 - physician's role, 4173
- emergency test of crashed L-1649, 10321
- Evaluating winds aloft by simplified field technique, 4835
- Evaluation charts on delay in administrative proceedings, 4647
- Evaluation of Vocational Potential Committee, Institute of Rehabilitation Services, report, 11892
- Evans, Dallas E., Venus and Mars nominal natural environment for advanced manned planetary mission programs, 8436
- Evans, Joanne M., relief, 13623
- Evans, Walter F.:
 - housing in Ghana, 6418
 - housing in Liberia, 6421
- Evansville, Ind., population, special census, 8954
- Evaporant feed device facilitates flash vapor deposition process in vacuum, 16955
- Evaporated milk, *see* Milk
- Evaporation:
 - assessment in nucleate boiling, 9907
 - fluid-bed fluoride volatility process recovers uranium from spent uranium alloy fuels, 9793
 - overflow system for standard Weather Bureau evaporation pan, 2318
 - rates, of carbide cathodes of uranium, zirconium, and solid solutions investigated, 6532
 - reservoirs, reduction, effects of monolayers on insects, etc., 7102
 - Salton Sea, techniques used to measure, 9572
 - studies (series), 9572
 - water from soil, effect of sample size and environmental conditions, 10
- Evaporators:
 - horizontal spray film, research and development, 6440
 - marine, thermal distillation of sea water, fundamentals of theory, 17390
- Evapotranspiration:
 - estimating potential from climatological data in arid and subhumid environments, 17831
 - studies (series), 6397
- Evensen, David A., nonlinear flexural vibrations of thin-walled circular cylinders, 14482
- Evenson, R. E., hydrologic inventory of Lompoc subarea, Santa Ynez River basin, Santa Barbara County, Calif., 1117
- Everett, Floyd D., domestic reserves and potential sources of ores containing copper, lead, zinc, and associated metals, 8340
- Everett, Wash., area wage survey, 6609
- Everhart, Philip E., boundary-layer transition on cooled 7.5° total-angle cone at Mach 10, 18021
- Every girl needs chance to become somebody, 4686
- Evidence:
 - National Advisory Commission on Civil Disorders investigations, compulsory testimony and production of evidence by witnesses summoned, law, 13541
 - permit appeal by U.S. from orders for return of seized property and to suppress evidence, report, 14990
 - refusal to testify, compelling of testimony and granting immunity in certain crimes, amend U.S. code—
 - hearings, 12306
 - report, 12377
 - testimony by Federal Aviation Agency employees and production of records in legal proceedings, FAA regulations, 11004-5
- Erjen, Victor H., Federal probation, journal of correctional philosophy and practice, 3309

Evolution:

Labidocera jollae group, etc., characteristics, 8544
rodent ethology, with emphasis on evolution of social behavior, comparative study, 15603

Examinations:

cybernetic testing, 8864
Russian 10-year school, final examinations, 1002
see also Civil service—*also* type or subjects of examinations.

Examiners, *see* Budget examiners—Hearing examiners—Transportation tariff examiners.

Excavating machinery, equipment, Federal item identification guides for supply cataloging, supplements, 3285

Excellence in design, 7394

Excess property, *see* Surplus property.

Exchanges (International), *see* International exchanges.

Excise taxes:

Federal excise tax data, 10687
interest equalization tax on foreign securities, extend act—
digest of testimony and statements, 9176
hearings, 6047
legislative histories of P.L. 90-59 and P.L. 89-243, 15052
IRS looseleaf regulations system, 1145, 3528, 4917, 8219, 11222, 15334
postpone certain reductions—
hearings, 17614
message from the President, 16154
see also names of items taxed.

Excitation:

local and irradiating, photodiffusion in nerve and muscle cells under effect of, USSR study, 14259
longitudinal, response of liquid propellant multistage launch vehicle, 11522
maximum response of simple beams to random excitation, 14381
vital staining of muscle tissue, USSR study, 14255

Executions, *see* Capital punishment.

Executive departments, *see* Government offices—Government supplies.

Executive inventory, questions and answers for executives, 10419

Executive Manpower Bureau, pamphlet, 10419

Executive Office of the President:
appropriations, 1967, supplemental, hearings, 2040
appropriations, 1968—
hearings, 6027, 10806
law, 13529
reports, 9097, 10791, 13658

Executive orders, *see* subjects.

Executive Papers, Joint Committee on Disposition of, reports, 705, 7695, 9102, 10553, 10577, 12260, 13628, 13649, 13677, 14958, 16241

Executives:

definition under fair labor standards act, 1665
development programs in public service, university-sponsored, 2193
opportunity knocks at executive suite (remarks), 17044
selection and development program, IRS, 1141, 9595
see also Service Corps of Retired Executives.

Exemplary Rehabilitation Certificates:

award to individuals discharged from Armed Forces under conditions other than honorable, etc., authorize, amend U.S. Code—
law, 404
reports, 626, 908

Exercise:

maximum exercise tolerance, ergometer, biomedical monitoring during dynamic stress testing, 7361
muscular, and intermittent venous occlusion, possible preventive effects on cardiovascular deconditioning after bed recumbency, study, 8408
physical exertion, effect on human organism, USSR study, 12689

Exfoliative cytology, *see* Cytology.

Exhaust nozzles, *see* Nozzles.

Exhaust plumes, surface heating rates and pressures resulting from hot exhaust gases, 6795

Exhibitions:

growth of United States, 1640-1851. History and Technology Museum, Smithsonian Institution, 18203
Smithsonian Institution, Dürer and his time, catalogue and notes, 10079
U.S. commercial, how to photograph, 7566
see also subject.

Exhibits, Federal exploration of American West, 8516

Eximbank, *see* Export-Import Bank of Washington.

Exira, Iowa:

Nishnabotna River in vicinity, engineer report—
departmental edition, 13980
document edition, 13556

Expansion (thermal):

glass formulation, with high coefficient of thermal expansion, 8400
thermodynamic properties related to expansion of 2-component gas, 11449

Expansion plugs, *see* Plugs.

Expeditions, Antarctic, *see* Antarctic regions.

Expenditures:

consumer expenditures and income, 1960-61, tables—
rural farm, 2522
rural nonfarm areas, 2493
urban, 2492
urban and rural, 2494
Education and Labor Committee, House, investigation—
hearings, 4544
report, 4517
nursing in small health agencies, procedures using work units, 5437
residential properties, additions, alterations, etc., 5850
see also names of departments etc.—*also* subject for which expenditures are made.
Expenditures of United States Government:
combined statement, 5611
monthly statement, 3580

Experimental medicine, *see* Medicine.

Experimental sealing study of fluid amplifier elements, 9850

Experiments and experimentation:

design in Army research, development and testing, conference proceedings, 96
designs of experiments as telescoping sequences of blocks for optimum seeking (as alloy development), 14490
radioisotope experiments in high school biology, bibliography, 5797
repeated measurements on experimental units in 2-way classification, 7348
sensitivity experiments, computer program simulates, 11439

Exploding wires, bridge device, pulse technique provides more accurate checkout, 2672

Exploration of Sea, International Council, *see* International Council for Exploration of Sea.

Explorations:

American West before 1880, exhibits of maps, surveys, etc., 8516

INDEX 1967

Explorations—Continued
and use of outer space, including moon
and other celestial bodies, treaty on
principles governing activities of
States, analysis and background data,
7791
ocean potential, USSR study, 1165
see also Outer space.
Explorer, *see* Satellites.
Explosion puffed dehydrated potatoes, esti-
mated cost of commercial production, 8808
Explosions:
effect on snow structures, 99
emergency escape system, 6796
fire and explosion prevention and protec-
tion, 8295
ordnance plant in Bowie County, Tex.,
settlement of claims—
law, 12158
reports, 637, 801
see also Nuclear explosions.
Explosive guns, feasibility study, 8410
Explosives:
and blasting agents, industrial, in United
States, 1966 consumption, 15463
and conditions required for safe storage,
USSR study, 1193
condensed, projectile impact initiation,
14343
explosive-loaded items, safety precautions,
military standard, 13923
Federal item identification guides for sup-
ply cataloging, supplements, 3293
cap-sensitivity methods, 9791
in rock, performance, methods for study-
ing, 5124
nitrogen dioxide in fumes from, rapid
colorimetric method for field determina-
tion, 14338
performance, effect of charge diameter,
2570
publications, price list, 2803
sensitivity testing, combination statistical
design, 9754
sound transmission of explosive shots, ef-
fect of weather, 9773
transporting, Navy driver's handbook, 7009
Expo 67:
customs tips, 9358
immigration inspection, what you should
know at time of entry to U.S. after
visit, 11213
universal and international exhibition (re-
marks), 11697
Exponential curves, *see* Mathematics.
Export control act of 1949, *see* Exports.
Export-Import Bank of Washington:
act of 1945, amend. hearing, 15150
annual report, 1034
appropriations, 1967, law, 405
appropriations, 1968, hearings, 15014
audit reports, 8130, 9070
change name, extend, etc.—
hearings, 10642, 12399, 15150, 16314,
16317
reports, 10597, 15095
export financing, how Eximbank credits,
guarantees, FCIA insurance work to in-
crease export profits, 6232
financing in credit sales of defense articles,
participation, hearing, 15150
general information, 6233
regulations for principals and agents,
1035
Export trade, *see* Commerce.
Exports:
agricultural policy (address), 1677
airworthiness approval procedures, 8044
by air, foreign trade reports, 3358
comprehensive schedule, 3127, 8223
control, quarterly report, 3247
crops, surplus removal, statutes, compli-
ation, 7262
current export bulletin, 3167

Exports—Continued
expansion—
Alabama (address), 10449
past, present and future (address),
11223
programs (remarks), 1949, 10466
regional products, hearings, 17678
export promotion, Action Committee on
Export Promotion, report, 7564
export success story (periodical), 3252
financing, Export-Import Bank, 6232
foreign trade—
airborne, summary reports, monthly,
3995
summary reports, monthly, 3998-4000,
4003, 4005, 10399
foreign trade reports, 3354-55, 3357, 8959,
12087-89
annual, 8961
full prosperity and progress (remarks),
240
impact on American labor, hearings, 6034
licenses approved and reexportations au-
thorized list, 3250
manufactured products, 1966, survey of
origin, current industrial reports, 17436
manufacturers' sales and orders, current
industrial reports, 3169
market bulletin, 4921
mutual defense assistance control act of
1951 (Battle act), report, 7147
National and Regional Expansion Coun-
cils, directory, 16099
President's E award for export excellence,
presentation to—
A. R. Wood Manufacturing Co. (re-
marks), 4448
Dole Company (remarks), 7295
Panefab International (remarks), 1949
York-Shipley, Inc., 4447
privileges, denial and probation orders
currently in effect, 11227
Rhodesian transaction, regulations and
related documents, 11885
sales promotion announcements, 3251
sales to countries in default in payment of
their obligations to U.S., applicability
of Johnson act, opinion of Attorney
General, 16789
statistical classification, schedule B, 1857,
3849, 5895-96, 7474
Philippine requirement regarding ship-
pers' export declarations, 5897
taxation, action Committee on Taxation,
Recommendations, status report, 9021
total trade, summary reports, monthly,
4003
trade by commodity, summary reports,
monthly, 3999
trade by country, summary reports,
monthly, 4000
U.S. to Saudi Arabia, farm products, sup-
ply and demand projections to 1975,
implications, 7886
United States trade with major world
areas, 10460
working day and seasonal adjustment fac-
tors and months for cyclical dominance
(MCD), 4361
see also Commerce—also names or classes
of articles exported.
Exposure value (EV) system expanded to
include filter factors and transmittance,
6765
Express, *see* Letters.
Extended care facility manual, 5504, 7120
Extension and Continuing Education, Na-
tional Advisory Council on, *see* National
Advisory Council on Extension and Con-
tinuing Education.
Extension Service, *see* Federal Extension
Service.
Extension Service, Cooperative, *see* Coopera-
tive Extension Service.
Extension work, agricultural, using visuals
in programs, 16569

Extraction (chemistry):
determination of gold by solvent extraction and atomic absorption, 16688
excellent metal values by fusion with ammonium sulfate or ammonium bisulfate, 6695

Extracts, *see* substances from which extracts are made.

Extradition, convention with Israel, correction of text, agreement, 13153

Extrapolation, Richardson's, application to numerical evaluation of sonic-boom integrals, 6859

Extrasensory perception:
report on parapsychology, USSR study, 9659
wonder and mystery of psychics, USSR study, 6528

Extravehicular operations, *see* Outer space.

Eye-glasses, *see* Spectacles.

Eyes:

chorioretinal lesions produced by thermal radiation, study, 10231

disorders, causes, etc., 18177

eye-movements and subjective turning responses to angular acceleration, 15980

nystagmic eye movements, influence on adaptation of interruption with opposing stimuli, 7447

oculometer developed to control machine by eye, etc., 14376

ophthalmoscopy in indirect light, USSR study, 12688

protection, occupational safety aid, 9700

rapid-eye-movement sleep deprivation, effects, 15900

recovery of dark adaptation, effect of wavelength and bandwidth of red light, 14318

research, NINDB, 8631

Eyre, Dorothy, relief, 537

Eyster, H. Clyde, mineral nutrient requirements of *Chlorella sorokiniana* in continuous pure culture, 14779

F

F-4, *see* Fighter planes.

F-106B, *see* Fighter planes.

F-111B, *see* Fighter planes.

F.A.A., *see* Federal Aviation Administration—Federal Aviation Agency.

F.C.C., *see* Federal Communications Commission.

F.C.I.A., *see* Foreign Credit Insurance Association.

F.C.P.C., *see* Federal Committee on Pest Control.

F.C.S., *see* Farmer Cooperative Service.

F.D.A., *see* Food and Drug Administration.

F.H.A., *see* Farmers Home Administration—Federal Housing Administration.

F.N.M.A., *see* Federal National Mortgage Association.

F.P.C.R. series, 4770-71

F.P.C. S series, 2247, 6262-63, 7973, 11017, 12508, 17760

FAA, *see* Federal Aviation Administration—Federal Aviation Agency.

FAA aviation news (periodical), 9440

Faber, Fred L., inventory of market news reports for eggs, 6173

Faber, John H., fly ash utilization, proceedings of symposium, 14329

Fabricated materials:

large seals fabricated from small segments reduce procurement lead time, 1461

nonmetallic, Federal item identification guides for supply cataloging, supplements, 3291

Fabrication, *see* names of materials fabricated.

Fabrics, *see* Textiles—also names of fabrics.

Fabuss, Bela M.:

investigation of calcium sulfate precipitation, final report, 14198

thermophysical properties of saline water systems, 12643

Face, *see* Head.

Facial tissue, suitability of Appalachian woods for sanitary tissue, 8300

Facilities handbook series, 13053

Facility operation, 7371

Facility outage and equipment failure report (RIS SM 6040-5), 10983

Fact book of U.S. Agriculture, 17324

Factories:

factory mutuals, a way of doing (address), 12129

Intrafactory mechanism for economic reform, USSR study, 4941

labor turnover, monthly release, 3259

size of establishments, 1963 census of manufactures, 4274

Factors contributing to increased resistance of the organism, 11277

Facts about America, 7491

Faculty (schools):

listens to students' serious evaluation of Lake Oswego High School, 17726

staffing American colleges and universities, 7913

teaching faculty in universities and 4-year colleges, spring 1963, general characteristics, etc., survey, 9413

Fading (radio), *see* Radio communication.

Faeth, Paul A.:

effect of optical radiations, etc., on trapping spectrum of cadmium sulfide, 14455

photodesorption of oxygen from nickel oxide powder, 16995

Fagen, Castle H., evaluation of laminated elastomeric bearings in UH-1 helicopter tail rotor, 17389

Failure reporting and management techniques in Surveyor program, 14406

Fair, Gale, exact semiclassical theory for galvanomagnetic effects in metals, 15581

Fair employment practices, *see* Discrimination in employment.

Fair labor standards act, *see* Labor standards.

Fair labor standards foreign trade act, *see* Labor standards.

Fair packaging and labeling act, *see* Packaging.

Fairbanks, Alaska:

flood of Aug. 1967, report, 17675

geology of permafrost tunnel, 17378

satellite telemetry/telecommand station, agreement with European Space Research Organization, 11836

Fairchild, John C., correlation of littoral transport with wave energy along shores of New York and New Jersey, 7925

Fairplay, Mount, geology of area, 12599

Fairs:

Budapest International Fair, displays, 12687

mobile trade fairs, guide to prospective operators, 4922

Fairweather (ocean survey ship):

launching (remarks), 7583

Fajardo-Carpio, Arturo V., relief, 551

Faib, Peter L., decoupling in design and synthesis of multivariable control systems, 18046

Fall armyworm, *see* Armyworms.

Fall out, *see* Radioactivity.

Fall River County, S. Dak.:

Cascade Springs quadrangle, geology, 14168

Hot Springs quadrangle, geology, 12597

Fallout, *see* Radioactivity.

Falls, trips, slips, and falls, occupational safety aid, 9708

INDEX 1967

Families:

- aid to families with dependent children—
 - Cleveland and Cuyahoga County, Ohio, study, 4386
 - Gary, Ind., 13435
 - protective payments, report, 9060
 - tables on percent of basic needs met, 17196
 - American families in poverty, fact sheet, 5600
 - by type, 1966, population characteristics, 16008
 - characteristics of metropolitan population, 10360
 - children of deprivation, changing course of familial retardation, 8966
 - family economics review, 3260
 - family food plan, sample menus and food list for week based on USDA economy plan, 10157
 - family planning—
 - community action for health, 2167
 - report, 1136
 - family status, Mar. 1966, population characteristics, 4350
 - food stockpile for survival, 1697
 - guard against accidents, 18163
 - health interview survey, characteristics and health measures reported, 7097
 - improved farm worker housing, handbook guide, 17728
 - improving opportunities of low-income rural families, 5674
 - income—
 - average, 16026
 - trends, 16035
 - working wives, their contribution, 11914
 - large family-rent subsidy demonstration program report, 5295
 - low and moderate income—
 - new programs in health, education, and welfare, 8193
 - rental and cooperative housing, FHA mortgage insurance, 12624
 - low-income—
 - helping through parent education, survey of research, 10402
 - leasing program administered by local housing authorities, 2382, 11199
 - rent supplement program, general information, 4900, 6422
 - Spanish-surname population of Southwest, characteristics, 9389
 - upward bound, 1967-68, program to help youth achieve college education, policy guidelines, etc., 9385
 - migrant agricultural workers, housing, guide, 11924
 - Negro in the West, social and economic condition, 15453
 - personal and family survival, course, announcement, 16507
 - poor, women's earning in, fact sheet, 7238
 - population characteristics, 7485
 - projections of number, 1967-85, population estimates, 5882
 - research relating to children, studies in progress, 8967
 - retired serviceman's family protection plan, 7376
 - social security information for young families, 15742
 - urban, clothing expenditures per member by sex and age, 14303
- Family farms, *see* Farms.
- Family life education, *see* Sex instruction.
- Family of Man award, accepted by W. Willard Wirtz, Secretary of Labor, on behalf of the President (remarks), 1353
- Family planning, *see* Birth control.
- Fancy catfish, 8025
- Fankhouser, James C., thunderstorm circulation and turbulence studies from aircraft and radar data, 10966

Fanning, John H.:

- addresses—
 - Apr. 17, 1967, 9949
 - July 7, 1967, 15596
 - Fans, lift fan studies, 11402
 - see also* Electric fans—Mechanical fans—Turbine fans.
 - Far East, *see* East (Far East).
 - Fara, Teresina, relief, 13606
 - Farber, Eugene, overtaking and passing on 2-lane rural highways, literature review, 14641
 - Farber, Florence, how government measures unemployment, 15437
 - Fares, *see* Motorbuses.
 - Farinas, Luis O. Martinez-, *see* Martinez-Farinas, Luis O.
 - Farley, T. A., space sciences, 8433
 - Farm animals, *see* Livestock.
 - Farm buildings—
 - building plans—
 - bout landing, 39
 - broiler house, pole construction, 40
 - cabin, concrete masonry construction, 5664
 - incinerator, concrete block, 4124
 - irrigation pipe trailer, 1707
 - 1½ story dwelling, 42
 - portable calf pens, 5659
 - swine feeder, 15865
 - 3-bedroom rural dwelling, 5662, 13232
 - 3-bedroom tenant house, 5663
 - 2-bedroom farm dwelling, 5658
 - vacation house, 8837
 - cooperative farm building plan exchange (series), 39-40, 1707, 4124-25, 5658-59, 5661-64, 8837, 15865
 - fire resistant construction, 15849
 - foundations, 17310
 - houses and equipment for laying hens, 10183
 - roofing, general information, 13223
 - wood products for, selection and use, 7264
 - Farm Center, World, *see* World Farm Center.
 - Farm credit, *see* Agricultural credit.
 - Farm Credit Administration:
 - appropriations, 1968—
 - hearings, 10629, 12397
 - law, 17558
 - reports, 10620, 13815
 - audit reports, 4862, 5988
 - circulars, 12484, 16544
 - report, 1965-66—
 - departmental edition, 9437
 - document edition, 9051
 - Farm employees, *see* Farm labor.
 - Farm equipment, *see* Farm implements and machinery.
 - Farm families, *see* Families.
 - Farm food marketing bill and its components, 6170
 - Farm implements and machinery:
 - current industrial reports, 3170, 5859, 15995
 - equipment for applying soil pesticides, 14735
 - Federal item identification guides for supply cataloging, supplements, 8286
 - Intrafactory mechanism for economic reform, USSR study, 4941
 - machines and equipment on farms with related data, 1964 and 1959, report, 10202
 - planning replacements, 4115
 - see also* Tractors.
- Farm income, *see* Income.
- Farm index (periodical), 3262
- Farm labor:
 - developments, 3264
 - employment and wage supplement, 3265
 - employer-employee relationship in agriculture sharecropping arrangements or landlord-tenant agreements under fair labor standards act, guide, 13176

Farm Labor—Continued

extend provisions of National labor relations act to agricultural employees, hearings, 15025
 good farm worker housing is good farm business, 2184
 hired working force of 1966, statistical report, 16487
 improved housing for workers, handbook guide, 17728
 interstate, contractors, registration, general information, 6203
 jobs from Gulf to Great Lakes, guide, 6202
 migratory agricultural workers—
 counties having 100 or more, 2811
 family housing, guide, 11924
 project grants for services—
 hearings, 15172, 17600
 law, 16144
 reports, 14972, 16366
 6 steps forward, 17186
 migratory, problem in U.S., report, 7784
 minors employed in agriculture under fair labor standards act, as amended in 1966, what crew leaders, etc., should know, 10182
 monthly report, 3263
 movement between farm and nonfarm sectors, Tennessee Valley, 17262
 on-the-farm training under cold war GI program—
 hearings, 10859
 law, 16133
 report, 10792
 seasonal work patterns of hired farm working force, 984
 supplement, 9387
 service programs to cope with rural change (remarks), 6204
 situation in selected States, 7882
 skills and earning power, improving, role of technical schools, case study, 5040
 slides and films, employment security, 12472
 traveler/el viajero, quarterly newsletter for migrant and seasonal farm workers, 7879
 USSR, protective masks available for agricultural workers, description, 2457
 Farm loans, *see* Agricultural credit.
 Farm machinery, *see* Farm implements and machinery.
 Farm management, *see* Farms.
 Farm mortgages, *see* Mortgages.
 Farm prices, *see* Prices.
 Farm products, *see* Agricultural products.
 Farm silos, 5656
 Farm supply cooperatives, *see* Farmer's cooperative organizations.
 Farm work, *see* Farm labor.
 Farm workers, *see* Farm labor.
 Farmer, Evelyn M., Department of Commerce publications, 1965 supplement, 4454
 Farmer, Robert E., jr., gibberellin-induced growth of dormant sweetgum, 8093
 Farmer Cooperative Service:
 appropriations, 1968, hearings, 10629, 12397
 FCS educational aid, 2229
 FCS educational circulars, 2230, 15234
 general reports, 2231, 7943-44, 12485, 15235, 16545
 information series, 2232
 Farmers:
 bargaining power (remarks), 10197, 13240
 better income for farmers, balanced abundance for consumers, 11938
 checklist for pesticide safety, 5668
 expenditures for pesticides, 6171
 farm operator level-of-living indexes for counties of United States, 13250
 farm operators in Tennessee Valley, multiple job holdings, 17262

Farmers—Continued

farmers unions play important role in development of rural America (address), 4095
 important role in new programs (address), 10159
 increased material interest and improved wages for collective farmers, USSR study, 2475
 insurance facts, 11928
 parity returns position, report, 18724
 print as Senate document, report, 15100
 publications, list, 8206
 self-employed—
 are you getting your social security credit, 2863, 13210
 reporting income for social security, special information, 1605
 social security information, 15741
 tax deductions from gross income for assessments for depreciable property levied by soil or water conservation or drainage districts, report, 7690
 tax guide, 1967 edition, 1142
 unrest, and what they want (remarks), 10196
 ways they do business, 2229
 wide gap between food prices and prices received (statement), 52
 see also Farmers' cooperative organizations.
 Farmers' bulletins, 1685-93, 4103-6, 5625-28, 7270-71, 8825-30, 10164-170, 11928-929, 13221-223, 14739-742, 15847-849, 17309-312
 Farmers' cooperative organizations:
 agricultural transportation, issuance of certificates of exemption on application and proof of eligibility, hearings, 947
 collective bargaining groups for poultry feed prices, 7944
 control unfair trade practices affecting producers of agricultural products, hearings, 10800
 cooperatives and rural-urban balance (remarks), 13220
 co-ops must use their strong bargaining power for better grain prices (remarks), 10196
 discrimination against members, report, 15086
 exempt from FPC jurisdiction, hearings, 16401
 grain elevators, inventory control and valuation practices, 15235
 how cooperatives grow, 12484
 income tax returns, 1963, supplemental report, 2412
 news for farmer cooperatives, 3631
 organizing and conducting cooperatives' annual meetings, 15234
 owning or leasing of covered hopper cars, 16545
 regional cooperatives handling supplies, 1964 and 1965, handbook, 7943
 statistics, 1964-65 survey, 12485
 transportation factors in marketing soybeans, cottonseed and their products, 16546
 two supply cooperatives serving low-income farmers, analysis in Appalachia, 2231
 ways farmers do business, 2229
 Farmers Home Administration:
 appropriations, 1968, hearings, 10629, 12397
 career opportunities, building new rural America, 1036
 consolidated act of 1961, amend—
 hearings, 15145
 report, 15090
 debtors' accounts, effort to collect or otherwise settle, GAO review, 4879

INDEX 1967

Farmers Home Administration—Continued efforts to have borrowers refinance their Government loans when private or cooperative credit becomes available, GAO review, 1103
 farm mortgage lending experience, 9395
insured loans—
 increase annual ceiling, hearings, 15145
 information for lenders, 4132
 land conveyance to Skyline Churches Cemetery, 288
 loan assistance to grazing associations, 1717
 loans for rental and co-op housing for senior citizens, etc., in rural area, 10194
 loans for water development and soil conservation, questions and answers, 4131
 operation of opportunity loan program in rural America, story in pictures and words, 5674
 opportunity loan program, general information, 8839
 rural housing loans, 10188
 strengthens family farms, etc., 5670
 valueless liens, etc., release, report, 15090
 watershed loan program, questions and answers, 4129
Farmhouses:
 farm building plans—
 cabin, concrete masonry construction, 5664
 1½ story dwelling, 42
 3-bedroom rural dwelling, 5662, 13232
 3-bedroom tenant house, 5663
 2-bedroom farm dwelling, 5658
Farming, see Agriculture—Dry farming.
Farms:
 auxiliary, private, economic role, USSR study, 5015
 banking and farm finance, present challenge (remarks), 6298
 beef slaughtering, cutting, and processing, 4106
 census of agriculture, 5903-4, 7499-7510, 8962-65, 10388-398, 12091-92, 13404-412, 14837-839, 16036-40, 17442
 commercial slaughter, meat, and lard production, etc., 11879
 cost situation, 1967 outlook issue, 994
 costs and returns, 986, 13943, 16488-490
 commercial cotton farms, 986
 commercial dairy farms, northeast and midwest, 16488
 commercial egg-producing farms, New Jersey, 16489
 commercial tobacco farms, Coastal Plain, North Carolina, 13943
 commercial tobacco-livestock farms, Bluegrass area and Pennyroyal area, Ky.-Tenn., 16490
 cropland adjustment program, eligibility of farm acquired to replace farm transferred to agency having right of domain, report, 15087
 differential assessment of farmland near cities, experience in Maryland, 17712
 dryland, in Great Plains, organizing and operating, regional research project GP-2, summary, 7883
 economies of size, theory, analytical procedures, etc., 6172
 electric water pumps, 10176
 family, Farmers Home Administration strengthens, 5670
 farm income programs (remarks), 10198
 farm policy for the future (address), 7269
 farm real-estate credit, analysis of borrowers and lenders, 2170
 father-son operating agreements, 10166
 grain, comparison of costs of storing on farm with rates paid for such storage, Commodity Credit Corporation, GAO report, 2342
 growth and capital accumulation in rolling plains of Oklahoma and Texas, polyperiod analysis, 17336

Farms—Continued
 increasing income through grazing associations, 1717
 irrigated, mosquito prevention, 7261
 irrigation systems, planning, 14652
 livestock, raising on small farm, 1692
 machine and equipment on farms with related data, 1964 and 1959, report, 10202
 management, publications, price list, 7055
 management supervisor, examination announcement, amdt., 12107
 milk cows on farms, production per cow, etc., 5683
 population, 1966, United States, 12084
 population, series Census ERS, 12084
 production and efficiency changes, summary report, 13247
 production, effects of increased incentives, USSR, 2468
 programs, operation and administration, problems and complaints, hearings, 10709
 prospector, cowhand, and sodbuster, historic places associated with farming, etc., in trans-Mississippi West frontier, 13008
 real estate market developments, 12457
 rent determination problem, 17311
 rope, types, selection, etc., and preparation for use on farm, 4103
 safety week, keep your sights on safety, safe use of firearms, facts, 10187
 taxation on rural-urban fringe, summary of State preferential assessment activity, 16486
 taxes, teaching program, 8221
 vegetable gardens, planning, planting, etc., 8831
 wheat storage, insect control, 4112
 where and how to get a farm, questions and answers, 17321
see also Electricity—also headings beginning Agriculture—Farm.
Farnes, Phillip E.:
 water supply outlook and Federal-State-private cooperative snow surveys for Montana, 4047
 water supply outlook for Montana, 18217
Farnsworth Lantern, see Color perception.
Farrar, J., nucleation and growth of ice crystals, 6442
Farrell, Edward J., information limits of scanning optical systems, 5173
FAS-M series, 1084, 2286, 4816-17, 8047-48, 9524-25, 11097-99, 12565, 14076, 16641-643, 17792
Fascenelli, Frederick W.:
 biomedical monitoring during dynamic stress testing—
 Flack test, 7360
 instrumentation and normal values, 7343
 Levy hypoxia test, 7344
 maximum exercise tolerance, ergometer, 7361
 tilt table orthostatic tolerance test, 7362
Fashion, origin and early history of the fashion plate, 14531
Fast announcement (periodical), 3266
Fast announcement service, Clearinghouse for Federal Scientific and Technical Information, 10437
Fast neutrons, see Neutrons.
Fast reactors, see Reactors (atomic).
Fasteners, see Fastenings.
Fastenings:
 fasteners, test methods, military standard, 15198
 potting compound for honeycomb sandwich fasteners, depth control, study, 6534
 threaded fasteners, Federal item identification guide, 15187
 zippers, replacing, 7288
Fat, see Fats.

Father-
 10166
 Father'
 Fatigue
 Fatigue
 stres
 Fats
 body
 fatty
 an
 forel
 hydr
 fee
 65
 outli
 pros
 in
 U.S.
 Fatty
 exp
 pro
 Faul
 Fauli
 Faulk
 1033
 Faults
 Enoc
 C
 zoo
 in
 1
 Faun
 Faust
 otill
 Fay,
 Fay,
 430
 Fayette
 begin
 FCC,
 sio
 FCIA
 cia
 FCP
 Co
 FCR
 FCS,
 FDA
 FDA
 FDA
 FDIC
 po
 FDL
 Fear
 to
 Feat
 flo
 Fec
 es
 fe
 h
 p
 Fec
 a
 a
 f
 c

- Father-son agreements for operating farms, 10166
 Father's Day, designate, report, 10771
 Fatigue, failure, aircraft structures, 17062
 Fatigue of materials, *see* Strains and stresses.
 Fats:
 body composition of military population, Ft. Carson, 1963, report, 120
 current industrial reports, 3169, 5860, 7478
 fats and oils situation, 3267
 fatty acids, expanding market for fats and oils, 10921
 foreign agriculture circulars, 3345
 hydrazine effect on fat transport as affected by blood glucose concentration, 65
 outlook (talk), 4704
 prospects for fats and oils and fatty acid industry (talk), 12460
 U.S. fats and oils, statistics, 4144
 Fatty acids:
 expanding market for fats and oils, 10921
 prospects for fats and oils and fatty acid industry (talk), 12460
 Faul, Henry, nuclear clocks, 7442
 Fauli, G. F. Valdes, *see* Valdes-Fauli, G.F.
 Faulkner, Rafford L., remarks, May 30, 1967, 10316
 Faults (geology):
 Enos Creek detachment thrust fault, Late Cretaceous and Cenozoic geology, 2360
 zoogeographic evidence for late Tertiary lateral slip on San Andreas fault, Calif., 17827
 Fauna, *see* Corals.
 Faust, George T., solution studies of chrysotholite, etc., 8190
 Fay, Joseph L., lectures, Aug. 1964, 15737
 Fay, William T., paper, Aug. 14-15, 1966, 4304
 Fayette County, W. Va., coal, carbonizing properties, 2576
 FCC, *see* Federal Communications Commission.
 FCIA, *see* Foreign Credit Insurance Association.
 FCPC, *see* Federal Committee on Pest Control.
 FCR series, 13943, 16488-490
 FCS, *see* Farmer Cooperative Service.
 FDA, *see* Food and Drug Administration.
 FDA papers (periodical), 4814
 FDA poster series, 16639
 FDIC, *see* Federal Deposit Insurance Corporation.
 FDL- (series), 4802
 Fear, Cape:
 to North Carolina-South Carolina State line, hurricane survey, engineer report—
 departmental edition, 2205
 document edition, 2005
 Feather, Milton S., preparation and purification of cellulose I-C14, 14087
 Feces:
 enteric microbial flora of man in oxygen-helium atmosphere, 79
 fecal coliforms in environment, sanitary significance, 6343
 human, clostridia recovery, development of method, 4182
 preparation for bomb calorimetry, improved method, 1742
 Fecundity:
 activities of Department of Health, Education, and Welfare Department, report on family planning, 1136
 analysis of fertility assumptions for OASDI long-range level-cost estimates, 15736
 fertility and educational attainment, Puerto Rico, 15715
 quantitative measures for analysis of fertility series, 7498
 Fedde, Gerhard F., annotated bibliography of literature (1792-1962) on elm spanworm, *Ennomos subsignarius* (Hbn.), 2287
 Federal agencies, *see* Government offices.
 Federal aid, *see* Grants-in-aid.
 Federal aid programs, *see* Roads and highways.
 Federal air pollution program, 5431
 Federal approach to multiple handicapped, 18142
 Federal Aviation Administration:
 aeromedical research facilities, Oklahoma City, Okla., acquisition and use, GAO review, 8139
 air traffic activity, reports, 1037, 6235, 16530
 airmen, other than flight crewmembers, certification, Federal aviation regulations, 2235
 airworthiness directives—
 large aircraft, summary, 3917, 12502, 17748
 periodical, 3256, 9439
 small aircraft, summary, 3918, 11007, 16562
 annual report, 10985
 bibliographic list, 4753
 budget, 1968, amendments, 16350
 contractions used in air traffic control, etc., handbook, change, 5716, 13273
 coordination between procurement of technical equipment and its ultimate utilization, GAO review, 2346
 definitions and abbreviations, Federal aviation regulations, 1038, 9441, 12488, 14000
 enforcement procedures, regulations, 10986, 14001, 17743
 establish—
 law, 389
 report, 906
 FAA handbook series, 2233, 4754-55, 6236, 7946, 10979-983, 14012
 Federal aviation regulations, 1038-41, 2234-37, 3917-18, 4757-59, 6238-41, 7947-51, 9441-44, 10986-11005, 12488-498, 14000-11, 15237-238, 16551-557, 17743-746
 status, 2238, 6242, 12501
 fees for copying and certifying FAA records, FAA regulations, 11004
 handbook series, 16558-560
 information services, handbook, 10979
 maintenance bulletins, handbook, 10982
 maintenance certification procedures, handbook, 10981
 organization, headquarters, handbook, 16558
 participation in cost of airport projects involving donated land, GAO review, 15300
 procurements, and costs of dedication ceremonies in Pacific region, GAO review, 11155
 publications, lists, 6237, 7059, 10984
 recognition and awards program, FAA handbook, 4754
 representatives of administrator, FAA regulations, 11004
 rule making procedures, FAA regulations, 1039, 12489
 statistical handbook of aviation, 4756
 technical standard order authorizations, regulations, 9443, 17744
 use of communications systems, FAA regulations, 11004
 violation investigation and reporting, handbook, 2233
 Federal Aviation Agency:
 transfer—
 law, 389
 report, 906
 see also Federal Aviation Administration.
 Federal buildings, *see* Public buildings.
 Federal career service at your service, 7546

INDEX 1967

Federal City College :
 establish in D.C.—
 law, 495
 report, 693
 Federal civil defense guides, 190-195, 4379-
 81, 5912-13, 8977-79, 10405-406, 13421-
 423, 14842
 Federal civil service, *see* Civil service.
 Federal Coal Mine Safety Board of Review :
 appropriations, 1967, supplemental, hear-
 ings, 2040
 appropriations, 1968—
 hearings, 7734
 law, 12170
 reports, 10560, 10766
 member, nomination of Dennis L. McElroy,
 hearing, 10863
 Federal Committee on Pest Control :
 pesticides monitoring journal (periodical),
 11008
 what it is, what it does, 9449
 Federal Communications Commission :
 actions in docket cases, reports, 3269
 actions on motions, report, 3269
 annual report, 6243
 appropriations, 1968—
 hearings, 9145, 15147
 reports, 10600, 15131
 decisions and reports, bound volumes, 2239,
 4760, 7954, 14017, 17750
 decisions, reports, public notices and other
 documents (periodical), 3270
 maritime services, radio stations on land,
 shipboard, etc., rules and regulations,
 3274
 members—
 nomination of Robert E. Lee, hearing,
 13855
 nominations, hearings, 6094
 memorandum opinions, etc., 3549
 nonbroadcast and general actions, reports,
 3269
 organization, FCC rules and regulations,
 3271
 practice and procedure, FCC rules and
 regulations, 3271
 press releases, 3721
 public notices, 3269, 3721
 regulatory and enforcement activities re-
 lating to small business, report, 4513
 rules and regulations, 4761
 transmittal sheets, 3271-79
 telephone and telegraph committees report
 in domestic telegraph investigation,
 17751
 Federal Correctional Institution, Englewood,
 Colo. :
 experimental and training projects, 1961-
 64, selected materials related to, 2798
 supplement, 2799
 Federal Council for Science and Technology :
 Government patent policy, annual report,
 2240
 report, 11780
 Federal credit unions :
 accounting manual, revised pages, 15239
 act, amend—
 hearings, 10643, 13845
 reports, 9283, 10603, 16386
 gifts to minors in D.C., permitting de-
 posits, report, 13639
 loans to directors, etc., amend act—
 hearing, 10643
 law, 12179
 reports, 9283, 10603
 modernization of loan, etc., procedures—
 hearing, 13845
 report, 16386
 organizing, 14018
 program, annual report, 17754
 shares purchase through payroll allotment—
 hearing, 13845
 Federal Credit Unions Bureau :
 accountants, opportunities, 6246
 annual report, 17754
 meeting with officials, hearings, 9150

Federal Crop Insurance Corporation :
 appropriations, 1968, hearings, 10629,
 12397
 audit report, 5991
 financial statements, 1966, GAO examina-
 tion, 4863
 Federal Departmental Wage Board, establish,
 hearing, 12425
 Federal Deposit Insurance Corporation :
 annual reports, 1043, 14019
 audit reports, 2341, 5937, 14149, 14925
 insured banking offices, list, supplements,
 3514
 meeting with officials, hearings, 9150
 press releases, 3722
 regulatory authority, strengthen—
 law, 409
 reports, 666, 674, 691
 report of call, 7958, 16567
 Federal Development Planning Committees
 for Alaska :
 appropriations, 1968—
 hearings, 7734, 9302
 law, 12170
 reports, 10560, 10766, 12252
 Federal disaster assistance, 7919
 Federal employees, *see* Government officials
 and employees.
 Federal employees compensation act, *see* Em-
 ployers' liability and workmen's compensa-
 tion.
 Federal employment, *see* Employment.
 Federal expenditures, *see* Finance.
 Federal exploration of American West, 8516
 Federal Extension Service :
 appropriations, 1968, hearings, 10629,
 12397
 circulars, 16568-569
 civil defense program, knowledge for
 survival, 3463
 cooperative extension services in District
 of Columbia, establish, hearing, 16387
 Extension Service review (periodical),
 3255
 FES aid, sanitation series, 14022
 Federal Field Committee for Development
 Planning in Alaska :
 appropriation of funds, authorize—
 law, 14913
 reports, 12375, 13679
 Federal Fire Council :
 film library list for safety programs, 14164
 fire experience, 16679
 library accessions, list, 3511
 minutes of meeting, 17816
 minutes of special meeting held at N.I.H.,
 12594
 publications, list, 4884
 recommended practices series, 8151
 Federal Government, *see* Government.
 Federal grading services, *see* Grading of com-
 mercial products.
 Federal Highway Administration :
 Administrator, nomination of Lowell K.
 Bridwell, hearing, 6126
 creation (remarks), 1950
 establish—
 law, 359
 report, 906
 general information, 12503
 location and design problems of interstate
 highway system segments in metropol-
 itan areas, GAO report, 15299
 Federal Home Loan Bank Board :
 appropriations, 1968—
 hearings, 9145, 15147
 reports, 10600, 15131
 current issues and policies (remarks),
 17756
 digest, 3282
 financial statements, 1966, GAO examina-
 tion, 15295
 meeting with officials, hearings, 9150
 member, nomination of John E. Horne,
 hearing, 12401
 press releases, 3723

Federal Home Loan Bank Board—Cont.
regulation of savings and loan holding companies, etc., strengthen—
hearings, 13849, 16316
report, 13796
regulatory authority, strengthen—
law, 409
reports, 666, 674, 691
report, 16573

Federal Home Loan Bank System:
combined financial statements, 1965—
member S & LA's, 6249
members of System, 16572

Federal home loan banks:
act, amend, hearings, 15019
audit report, 14924
financial statements, 1966, GAO examination, 12586

Federal Hospital Insurance Trust Fund,
Board of Trustees, See Board of Trustees
of Federal Hospital Insurance Trust Fund.

Federal Housing Administration:
acquired residential properties, savings possible by consolidating management,
GAO report, 11585
audit report, 12204

FHA mortgage insurance on housing for
elderly, 6427

FHA regulations, 6250-56, 11011-13,
12505, 17757

FHA's experimental housing program,
6429

financial statements, 1965, GAO examination,
11146

financing condominiums, 2384, 4903
financing home purchases and home
improvements under FHA programs,
16708

handbook for multifamily projects, 2245
home mortgage insurance—
area trends, 9454, 12504
State trends, 9455, 12506

home mortgage payments, guidelines,
6428

houses, newly constructed, need for
strengthened procedures to reduce number
of extra final inspections, GAO
report, 11148

how FHA helps on home trade-ins, 4901
insurable loans, digest, 6433

insured loans for major home improvement,
4904

insured mortgages, investment of institutional
funds in, 12626

manual, mortgage's handbook, home
mortgage programs, revisions, 4767-69,
14025

mortgage insurance, urban renewal, consumer
bulletin, 11203

multiple dwelling projects, investigation—
hearings, 2118
hearings, errata, 9314
report of findings, 12392

nursing home insurance, 1965 survey,
6435

press releases, 3724
rental housing program, what it is, how
it works, 6423

three ways to finance home improvements
through FHA, 11202

title 10, mortgage insurance, land development
handbook, 16575

Federal intermediate credit banks:
debentures issued, delete interest rate
limitation—
hearing, 707
report, 633

farm credit system, audit reports, 4862,
5988

Federal item identification guides:

brush electrical contact, 6148
compressors, reciprocating, rotary, and
centrifugal, 18916
conduit, electrical, 17694
conduit fittings, 15183

Federal item identification guides—Cont.
electrical posts, splices, and terminals,
10892

furnaces and space heaters, 15184
glass, figured, corrugated, plate, sheet,
and spandrel, 6149

heating elements, electrical, 16462
improvement program procedures manual,
2147

inner tube, pneumatic tire, 15185
insulation, thermal, 13917

insulators, electrical, 17695
keys and pins, 17696

knobs, dials, and pointers, 17697
pipe and tube, metallic, 10893

resistors, fixed and adjustable, 10894
rivets, rivet caps, and collars, 15186
rod and rod section, ground, 10895

threaded fasteners, 15187
tires, pneumatic and solid, 10896
washers, 16463

Federal item identification guides for supply
cataloging, supplements, 3283-93

Federal Judicial Center:
establish—
hearings, 12306, 16422
report, 12258

Federal land banks:
farm mortgage lending experience, 9395

federal land bank system, half century of
service to agriculture, 16544

loans, stockholder personal liability on
report, 15130

medal in commemoration of anniversary—
law, 397
report, 690

Federal lands, see Public lands.

Federal Library Committee, newsletter,
3337

Federal manual for supply cataloging, 12439,
16458, 17689

Federal Maritime Administration:
establish—
hearings, 16335
reports, 15009, 16278

Federal Maritime Commission:
activities, responsibilities, etc. (remarks),
6260

American merchant marine grows under
its guidance (address), 9466

appropriations, 1967, law, 501
appropriations, 1968—
hearings, 10632, 16390
reports, 10616, 16372

authority to exempt water carrier operations
from certain provisions of
shipping act, 1916—
hearings, 4552
law, 482

Commissioner, nomination of Ashton C.
Barrett, hearing, 15153

decisions, bound volume, 15244
decisions, separates, 3294

economic and promotional responsibilities
of regulatory agency (remarks), 16579

functions (remarks), 16577-578
legislation and activities report, hearings,
16337

orders, notices, rulings and decisions,
3662

press releases, 3725
pre-trial discovery procedures, empower to
adopt—
hearings, 13852, 16337
report, 15084

report, 1966—
departmental edition, 7967
document edition, 7594

SP series, 2246-47, 8258-60, 7968-72,
9456, 11016, 16577-579

Federal Mediation and Conciliation Service:
annual report, 12507

appropriations, 1967, law, 491
appropriations, 1968—
hearings, 9144, 13841
reports, 10612, 15082

INDEX 1967

Federal Metal and Nonmetallic Mine Safety Board of Review, create, report, 647
 Federal National Mortgage Association: audit report, 13558
 financial statements, GAO examination, 2343, 4488, 14150
 increase borrowing and purchasing authority, reports, 4500, 4502
 participation certificates outstanding, inclusion in public debt limitation—law, 13526
 law, legislative history, 15051
 report, 12273
 press releases, 3726
 Federal news clip sheet, 3296
 Federal offenders in United States district courts, 8799
 Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Fund, *see* Board of Trustees of Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds.
 Federal Open Market Committee: monetary policy framework, analysis, 7740
 rules of organization, availability of information, and procedure, 14046
 Federal personnel manual, *see* Civil service.
 Federal plan for meteorological services and supporting research, 9431
 Federal plan for National Agricultural Weather Service, 6226
 Federal plan for National Fire-Weather Service, 9432
 Federal planning, *see* Economic policy.
 Federal Power Commission: annual report—departmental edition, 6261
 document edition, 5982
 appropriations, 1968—hearings, 9145, 15147
 reports, 10600, 15131
 career opportunities, accountants, attorneys, etc., 4779
 Commissioner, nomination of Carl E. Bogge, hearing, 15153
 daily news digest, 3629
 Federal power act, text, 17759
 jurisdiction, amend act, hearings, 16401
 laws, compilation, 1984
 nominations, hearings, 6094
 practice and procedure rules, 3308, 14032
 press releases, 3727
 prevention of power failure, final report, 14030
 publication list, 6265, 14031
 R series, 4770-71
 regulations under Federal power act, 3816
 changes, 2254
 reports, opinions, decisions, and orders—bound volumes, 14026, 16581
 cumulative index-digest, bound volume, 17758
 monthly, 3307
 S series, 2247, 6262-63, 7973, 11017, 12508, 17760
 safety of interstate natural gas pipelines, prescribe safety requirements, etc., hearings, 6093
 Federal Prison Industries, Inc.: annual report, 2797
 audit report, 5989
 financial statements, 1966, GAO examination, 4864
 Federal Prison Service, correctional officer, examination announcement, 7541
 Federal probation (periodical), 3309
 Federal procurement regulations, FPR amendments, 3310
 Federal property, *see* Public property.
 Federal Radiation Council: appropriations, 1967, law, 491
 appropriations, 1968—hearings, 9144, 13841
 reports, 10612, 15082
 reports, 17761

Federal Railroad Administration: establish—law, 389
 report, 906
 Federal Reformatory, Chillicothe, lands, relinquish jurisdiction to Ohio, law, 460
 Federal register, 3311-12
 index, 3313
 Federal regulations, *see* Code of Federal regulations—also subjects.
 Federal Republic of Cameroon, *see* Cameroon.
 Federal Republic of Germany, *see* Germany.
 Federal Republic of Nigeria, *see* Nigeria.
 Federal reserve agents fund, transactions, 3424
 Federal reserve banks: act of 1913 with amendments, text, 1985
 condition statement, 3258
 credit extension, amend law as to security acceptable—
 hearing, 7800
 report, 9282
 hours, opening and closing, and holidays, 3651
 interdistrict settlement fund, transactions, 3424
 monetary policy (remarks), 2263
 purchase of foreign govt. obligations, authorize—
 hearings, 7800
 report, 9281
 State member banks, list, 6305
see also other headings beginning Federal reserve.
 Federal reserve bulletin, 3314
 Federal reserve chart book, financial and business statistics, 3315
 historical supplement, 16591
 Federal reserve member banks: assets and liabilities—
 monthly report, 3047
 summary report, 3048
 changes in State bank membership, weekly announcement, 3090
 deposits, money supply, currency, etc., 3567
 deposits, reserves, and borrowings, bi-weekly report, 3201
 income, 1965, statistical release, 2262
 loans to executive officers, limitation, amend—
 hearings, 7800, 10643
 law, 12179
 reports, 9283, 10603
 loans to executive officers, regulations, amendment, 12334
 payment of interest on deposits, Federal reserve regulation Q, 6301
 public information act, effect, 14042
 reserves, factors affecting, 3258
 reserves of member banks, regulation, 4788
 supplements, 4789, 8003
 State member banks—
 lists, 3895, 6305
 securities, regulation, 11057
 Federal reserve par list, 2258, 3316, 17762
 errata, 4782
 Federal reserve system: Federal reserve act, amend—
 hearings, 7800, 10643, 17595
 laws, 12179, 17541
 reports, 648, 9281, 9283, 10603, 13816
 Federal reserve policy and credit markets (remarks), 1061
 foreign exchange operations, 8005, 16599
 international responsibilities (remarks), 4787
 looks at balance of payments (remarks), 2261
 monetary control, insures prosperity for all (remarks), 12536
 regular audit by Comptroller General, provide, hearings, 17595

Federal Reserve System Board of Governors: annual report, 9488
 applications received, or acted on, during week, 3035
 authority, rules regarding delegation, 12535
 functions, delegation, authorize—
 law, 469
 report, 667
 hearings, formal, rules of practice, 15250
 hours, opening and closing, and holidays, 3651
 meeting with officials, hearings, 9150
 member, nomination of William W. Sher-rill, hearing, 9308
 press releases, 3728
 publications, list, 4785, 12532
 regulation series, 1066, 4788-89, 6301, 8003-4, 9495, 11057, 12534, 14043-44
 regulatory authority, strengthen—
 law, 409
 reports, 666, 674, 691
 research library, recent acquisitions, 3826
 rules of organization—
 and of procedure, 16597
 availability of information, and proce-dure, 14046
 rules regarding availability of informa-tion, 14047
 staff economic study, 4790, 6303, 14040
 statistical releases, 3052
 Federal retirement systems, *see* Civil service pensions.
 Federal Safety Council: objectives, membership, organizational structure, 8006
 work injuries, facts and figures, 1070
 Federal savings and loan associations: combined financial statements, 6249
 rules and regulations, changes, 9453, 15242
see also Savings and loan associations.
 Federal Savings and Loan Insurance Corpo-ration: audit reports, 11145, 12202
 financial statements, 1045; 4766, 7962, 11009, 15240
 meeting with officials, hearings, 9150
 regulatory authority, strengthen—
 law, 409
 reports, 666, 674, 691
 savings and loan associations, insured sav-ings and mortgage lending activity, se-lected balance sheet items, 3365
 Federal service, *see* Civil service.
 Federal Services Finance Corporation, in-vestigation, hearings, 726
 Federal specifications, *see* Government sup-ples.
 Federal standards, 1072, 2267-70, 4794-96, 6307-15, 8008, 9498, 11062-65, 16601-604, 17764
 index, 6335
 Federal-State-local relations, *see* Intergov-ernmental relations.
 Federal supply catalogs, 2151, 3319-21, 7855-56
 Federal supply classification handbook, groups and classes, 975
 Federal supply code, *see* Government sup-ples.
 Federal support to universities and colleges, 17057
 Federal system and economic development, role of State planning, 13934
 Federal system as seen by Federal aid offi-cials, print additional copies, reports, 4597, 10585
 Federal tax policy, *see* Taxation.
 Federal test method standards, 9499, 15252, 16605
 Federal textbook on citizenship, 11211, 12629-632, 14190-191
 Federal Trade Commission: appropriations, 1968—
 hearings, 9145, 15147
 reports, 10600, 15131

Federal Trade Commission—Continued
 commissioner, nomination of Mary G. Jones, hearing, 6095
 decisions—
 bound volume, 12538
 separates, 3328
 news summary, 3329
 press releases, 3729
 report, 1966—
 departmental edition, 6336
 document edition, 5978
 trade practice rules, proposed, 3779
 Federal Wage Board Committee, establish, hearings, 16432
 Federal Wage Board Council, appoint, hear-ings, 16432
 Federal wage-hour law, *see* Labor standards.
 Federal Water Pollution Control Adminis-tration: appropriations, 1968—
 hearings, 12287, 16393
 report, 13678
 career opportunities, your career and clean water for America, 8012
 establish, text, 6540
 manpower and training needs in water pollution control, report to Congress, 17615
 press releases, 3730
 Federal Youth Correctional Institution, Englewood, Colo., *see* Federal Correctional Institution, Englewood, Colo.
 Feed, *see* Food for livestock.
 Feed grains, *see* Grain.
 Feed mechanisms, automatic equipment for livestock and poultry, 8830
 Feed systems (antennas), *see* Antennas.
 Feed-through connector couples rf power into vacuum chamber, 8386
 Feed-thru flange is useful in vacuum applica-tions to cryogenic temperatures, 6778
 Feed water, *see* Boilers.
 Feedback control systems: influence of response feedback loops on lateral-directional dynamics of variable-stability transport aircraft, 11516
 negative, reduce pump oscillations, 8473A
 preregulator feedback circuit utilizes light actuated switch, 2663
 problem of meeting movements, USSR study, 15427
 state variable, digital computer program for analysis and design, 14397
 time-optimal response by means of dis-continuous rate compensation, 16898
 Feeders: materials, industrial plant equipment handbook, 6141
 swine, farm building plan, 15865
 Feeding programs (space flight), *see* Menus for space flights.
 Feeding the child with a handicap, 13416
 Feer, Mark C., address, Nov. 14, 1966, 1936
 Fees: architect-engineer, Government-wide ad-ministration of certain statutory and regulatory requirements, GAO reviews, 9548, 16668
 attorneys, recovery, amend interstate com-merce act, hearings, 17645
 bankruptcy filing, reallocate part, report, 16248
 Federal Aviation Agency records, copying and certifying, FAA regulations, 11004
 foreign countries for visa of United States passports, list, 7145
 lockage, Welland Canal, agreement with Canada, 11872
 migratory bird hunting stamps, increase, reports, 624, 12266
 NASA cost plus award for contracting guide, 16888
 outdoor recreation, questions and answers, 7030

INDEX 1967

- Fees—Continued
 - ship mortgage certified copies, reduce cost—
 - hearings, 4552
 - law, 364
 - report, 887
- United States employees, jurisdiction of district courts over actions to recover, limitation, increase, amend Tucker act, report, 15077
- Feller, Charles E., dynamic response of gaseous-hydrogen flow system and its application to high-frequency combustion instability, 12953
- Feistel, Terrell W., flight investigation of COIN-type STOL aircraft, 15572
- Feitler, Stanley A.:
 - feldspar resources and marketing in eastern United States, 8339
 - mineral industry of New Hampshire, 2560
 - mineral industry of New York, 5118
- Feldman, Herman, relief, 266, 785
- Feldspar:
 - resources and marketing in eastern United States, 8339
 - ternary diagrams of quartz-feldspar content of pegmatites in Colorado, 1111
- Fellowships:
 - city planning and urban studies fellowship program, appropriations, extend authority—
 - law, 14910
 - reports, 12360, 14945
 - experienced teachers, elementary and secondary, for graduate study, program, 6182
 - higher education act of 1965, administration of programs, 1966, notes and working papers, 12422
 - national defense education act—
 - graduate program for pre-doctoral study, 2137
 - graduate 1967-68 programs, 4715
 - modern foreign language program, 7905
 - National Science Foundation, 8566
 - nurse, special research fellowships, pre-doctoral and postdoctoral, general information, 15711
 - postdoctoral, in educational research, 1012, 15216
 - prospective teachers, 1967-68 programs, 7906
 - Public Health Service awards, 1966 funds, 7086
 - teacher education—
 - law, 12176
 - reports, 12275, 13643, 13805
 - water pollution control research and training grants 1966 awards, list, 2274
- Felt, current industrial reports, 3170, 4336
- Felton, Jean S., survey of medicine and medical practice for rehabilitation counselor, 10128
- Felton, Joseph M., national space program, its values and benefits, 9169
- Fence posts, preservative treatment, 10165
- Fenn, David B., steady-state performance of 7-tube NaK-cooled potassium condenser, 12937
- Ferber, Ellen:
 - goodbye to birds and bees, 10932
 - voice of the silent stage, 4723
- Ferguson, Marion, how to determine nursing expenditures in small health agencies, 5437
- Fernandez, Manuel Rodriguez, *see* Rodriguez-Fernandez, Manuel.
- Fernandez, R.:
 - ice crystal growth rates and hydrate reaction kinetics, 6447
 - thermodynamics and kinetics in hydrate and freezing processes, 6446
- Fernandez-Bravo y Amat, Alberto, relief, 9201, 12234, 13489
- Fernandez-Conde, Augusto J., relief, 299, 322, 599, 864
- Fernández Noda, Esteban, relief, 310, 504, 815
- Fernando Pó, labor conditions, 5073
- Ferns, types, studies, 15601
- see also* Grammitis.
- Ferrando, Maria Jordan, *see* Jordan Ferrando, Maria.
- Ferraro, Francesco Urga, *see* Urga-Ferraro, Francesco.
- Ferraro, Giovanni Urga, *see* Urga-Ferraro, Giovanni.
- Ferrell, James K.:
 - low pressure steam-water flow in heated vertical channel, 7430
 - two-phase flow through abrupt expansions and contractions, 7431
- Ferrians, Oscar J., Jr., effects of earthquake of Mar. 27, 1964, in Copper River basin area, Alaska, 2371
- Ferries, allow use of British Columbia ferries for Alaska-bound cargo, hearing, 13851
- Ferris, James C.:
 - static stability investigation of single-stage sounding rocket, 12933
 - transonic aerodynamic characteristics of model of supersonic fighter-bomber airplane with external fuel tanks and other modifications, 1505
- Ferris, Robert G., prospector, cowhand, and sodbuster, etc., 13005
- Ferris-Prabhu, Albert V. M., relief, 9224
- Ferrites, controlled, content improves weldability of corrosion-resistant steel, 8475
- Ferroalloys, minerals yearbook chapter, 6633
- Ferrocenes, polymers, annotated bibliography, 2156
- Ferro-silicon, mineral industry survey, quarterly, 3332
- Ferry County, Wash., Republic quadrangle and part of Aeneas quadrangle, geology, 16682
- Fertal, Martin J., modal split, estimating transit usage, 7100
- Fertility, *see* Fecundity.
- Fertilizers:
 - chemistry and technology research, USSR, 15350
 - fertilization uneconomic for forage improvement in Louisiana pine plantations, 14117
 - manufacturing, industry wage survey, 12774
 - publications, price list, 7052
 - South America, mineral sources, 1110
 - supply, 8819
 - TVA 1967 trends, 17261
 - use in United States, by crops and areas, 1964 estimates, 14760
- see also* names of substances.
- FES, *see* Federal Extension Service.
- Fescue foot, cattle, what to do about it, 14750
- Fetal death, *see* Still-birth.
- Feth, J. H., Lake Bonneville, geology and hydrology of Weber Delta district, including Ogden, Utah, 6400
- Fetheroff, C. W., electrolysis cell for orbital test, 2607
- Fetter, Theodore A., piggyback traffic characteristics, 8233
- Ffolliott, Peter F., occurrence of stem features affecting quality in cutover southwestern ponderosa pine, 14144
- FG series, 4382, 5914-15, 17450
- FHA, *see* Farmers Home Administration—Federal Housing Administration.
- FIAT-Soviet auto plant and Communist economic reforms, report, 12291
- print additional copies, report, 10594
- Fiber boxes, *see* Boxes.
- Fiberboard, *see* Pulpboard.
- Fiberglass, *see* Glass fibers.
- Fiberings of oxides in refractory-metal materials, 9900

Fibers
bond
tr
cotto
ch
disco
er
fluid
pa
food
food
synt
Unit
ch
vege
35
sec
et
Fibrin
Fibrog
char
tion
Fibros
eval
Fibros
Fibrou
Fibrou
tions
Fichm
Fichter
nant
repo
Fichter
crac
Fichter
revie
Field,
butt
et
butt
14
Field
Field
Field
Field
emp
Field
etc.,
Field
Field
8755
Field
oper
1948
Field
Law
Just
Field
calci
Fieldin
hypoc
Fieno,
adjo
(ZP)
Figze,
crac
re
al
emp
an
Flight
F-4,
ne
re
F-10
17
F-11
18
varie
de
sp

Fibers:
 bonded, nonwoven fabrics, current industrial reports, 4336
 cotton and other fiber problems and policies in U.S., 15666
 discontinuous-fiber composites, metallurgical and geometrical factors affecting elevated-temperature tensile properties, 8498
 errata, 14451
 fluid treatment and chemical modification, patent classification definitions, 5369
 food and fiber for future, report, 13063
 food and fiber in Nation's politics, 17123
 synthetic, industry wage survey, 8317
 United States, food and fiber system in changing world environment, 18144
 vegetable, foreign agriculture circulars, 3345
see also names of certain plants, textiles, etc.
Fibrinolytic blood, *see* Blood.
Fibrograph, digital, for measuring length characteristics, of cotton fibers evaluation, 8834
Fibrosampler, for sampling cotton fibers, evaluation, 8834
Fibrosis, cystic, facts, 17148
Fibrous glass, *see* Glass.
Fibrous reinforcements for space applications, 11418
Fichman, Philip J., relief, 853
Fichter, Joseph H., graduates of predominantly Negro colleges, class of 1964, special report, 14625
Fichter, W. B., stresses at tip of longitudinal crack in plate strip, 14498
Fiedler, Fred E., second level management, review and analysis, 13450
**Field, William D.:
 butterflies of genus *Calyceops* Scudder etc., 5309
 butterflies of new genus *Calystryma*, etc., 14537**
Field bakery operations, 15947
Field CBR collective protection, 5740
Field crops, *see* Crops.
Field directory, HEW, 12619
Field employees, *see* Government officials and employees.
Field manuals, *see* names of departments, etc., issuing field manuals.
Field sanitation team training, 10264
Field seeds, supply and disappearance, 5680, 8755
Field Services Office, Commerce Dept., cooperative offices, partners in progress, 1948
Field surveys, President's Commission on Law Enforcement and Administration of Justice, 13058-62
Fiedler, William L., ionic conductivity of calcium and strontium fluorides, 6866
Fielding, G. H., BW contamination with hypochlorite, 10012
Fieno, Daniel, transport study of real and adjoint flux for NASA zero power reactor (ZPR-1), 11535
**Figge, I. E.:
 crack propagation, delayed failure, and residual static strength of titanium, aluminum, and stainless alloys in aqueous environments, 6872
 empirical equation relating fatigue limit and mean stress, 9878**
**Fighter planes:
 F-4, supply and maintenance support, need for improvement, Navy Dept., GAO report, 11147
 F-106B aircraft flashblindness experiment, 17349
 F-111B aircraft program, appropriations, 1968, hearings, 16388
 variable-sweep tactical, rolling stability derivatives at subsonic and transonic speeds, 6887**

Figs:
 dried, U.S. standards for grades, 6133
 production, use, value, 1965-66, by States, 14695
FIIG, *see* Federal item identification guides.
**Fiji Islands:
 Geniostoma, description, title page and index, 17048
 mineral industry, minerals yearbook chapter, 9759
 new and noteworthy flowering plants, studies, 12997
 plant quarantine import requirements, 17303**
Filament-winding plastics, syntheses, properties, and uses of m-aminobenzyl amine (MABA), 9989
Filamentary materials, composites, high-performance, Air Force basic research, 15890
**Filaments:
 glass-epoxy fabricated plates, compressive behavior, 9895
 hot tungsten, synthesis of higher order hydrocarbons, 8504
 meteoroid damage to filamentary structures, 16899
 microscopic, or other parts, cutting, etc., micromanipulation tool adapted to many uses, 8446
 winding, fabrication techniques for fiber glass reinforced primary aircraft structures, 4222**
Filippi, Cesar A., threshold reduction techniques study, 6716
Filippi, Siegfried, new Lie series method for numerical integration of ordinary differential equations, etc., 9877
**Fillers (in wood, metal, etc.):
 composite weld rod corrects individual filler weaknesses, 9862
 photosensitive filler minimizes internal stresses in epoxy resins, 14429**
Fills, behavior of beach fill, Sherwood Island State Park, Conn., 13976
Film badges, *see* Dosimeters—Photographic film detectors.
Film boiling, *see* Boiling.
Film libraries, *see* Motion pictures.
Film slides, *see* Filmstrips.
Film strips, *see* Filmstrips.
**Films (coatings):
 complex surfaces plated by thin-film deposition in one operation, 8447
 film-transfer studies of 7 ball-bearing retainer materials in 60°R (33°K) hydrogen gas at 0.8 million DN value, 2709
 oxide film on metal substrate reduced to form metal-oxide-metal layer structure, 12841
 permits low-force scribing, 6772
 photodegradation of polymer films, surface effects, 18113
 process forms effective electrical contacts on semiconductor crystals, 11471
 uniform reflective films deposited on large surfaces, 5203
see also Monomolecular films.**
**Films (coverings):
 thin films, 2d colloquium on, Budapest, Hungary, 12740**
Films (metallic), *see* Metallic films.
**Films (photography):
 film, photographic, black and white, classification and testing methods, Federal standard, 11065
 gas pressure feeds film into camera at high speeds, 5143
 polaroid film helps locate objects in inaccessible areas quickly, 6743
see also Motion pictures.**
**Filmalides:
 employment security and service, farm labor, etc., 12472
 housing and community development, bibliography, 11204**

INDEX 1967

Filmslides—Continued

- photographic, mount for use with overhead projectors, Federal standard, 16604
- Filmstrips:
 - aberrant cells, nature of cancer, 15674
 - catalog of copyright entries, 12435, 17685
 - housing and community development, bibliography, 11204
 - Library of Congress catalog, 3506
 - medicine and allied sciences, film reference guide, 13073
 - Public Health Service, 1967 film catalog, 17045
 - United States and the world, introduction to our foreign relations, 5553
- Filters and filtration, filter pack technique for classifying radioactive aerosols by particle size, final report, 10017
- see also Digital filters—Kalman filters—Light filters.

Finance:

- agricultural review, 985
- supplement, 10918
- agricultural balance sheet, 17308
- Atomic Energy Commission, 1967 report, 17403
- balanced financial policy (remarks), 2946
- banking and farm finance, present challenge (remarks), 6298
- city government, 13399
- code of Federal regulations, 6285
- combined financial statements—
 - member 8 & LA's of Federal Home Loan Bank System, 6249
 - members of Federal Home Loan Bank System, 16572
- daily statement of Treasury, 3183
- DSA manual, 979, 13913-914, 17693
- export financing, Export-Import Bank, 6232
- financial frontiers (remarks), 18241
- financial intermediaries' role in U.S. capital markets, 6303
- financial liquidity, monetary policy, and outlook for corporate profits (remarks), 11056
- financial management practices in Labor Department, GAO review, 8147
- financial operating data of affiliated food wholesalers, comparison, 4123
- financial protection for Federal employees, 1925
- financial statements—
 - Commodity Credit Corporation, GAO examination, 8132
 - Federal Crop Insurance Corporation, GAO examination, 4863, 5991
 - Federal Home Loan Bank Board, GAO examination, 12595
 - Federal home loan banks, GAO examination, 12586
 - Federal Housing Administration, GAO examination, 11146, 12204
 - Federal National Mortgage Association, GAO examination, 2343, 14150
 - Federal Prison Industries, Inc., GAO examination, 4864
 - Federal Savings and Loan Insurance Corporation, 1045, 4766, 7962, 11009, 15240
 - Housing Assistance Administration, GAO examination, 4875
 - southeastern Federal power program, GAO examination, 15296
 - submission by Government agencies, etc., regulations, 17267
 - Tennessee Valley Authority—
 - annual, 1647
 - GAO examination, 6375, 7604
 - Veterans Canteen Service, Veterans Administration, GAO examination, 4865
 - Virgin Islands Corporation, GAO examination, 14151
- financial summary, foreign economic assistance, 16725

Finance—Continued

- financing civil service retirement system administered by Civil Service Commission, GAO report, 9547
- financing college education, programs, etc. (remarks), 5571
- financing condominiums through FHA, 2384, 4903
- financing home purchases and home improvement under FHA programs, 16708
- financing livestock exports, 14076
- fiscal policy (remarks), 1653, 1656
- fiscal policy and national goals after Vietnam (remarks), 11883
- fiscal policy, orchestration, initiative and innovation in central banking (remarks), 9493
- forest fire control, cooperative program, financing, 9527, 15276
- General Accounting Office findings, etc., for improving Government operations, 15294, 16155
- Government contingent liabilities and assets, reports—
 - law, 513
 - legislative history, 9177
 - report, 702
 - Senate amendments, summary, 4567
- government finances, GF series, 180, 1881-82, 5886-87, 7492, 10380, 13399-400, 16030-31
- governmental, 5886-87
 - correction notice, 16030
- governmental finances and employment, 1966, chart book, 1831
- highway statistics, 13101
- joint financial management improvement program, annual report, 11144
- local Government finances in selected metropolitan areas, 1882, 16031
- long term look at fiscal policy (remarks), 2952
- machine tool financing, 15730
- management system, actions to improve, U.S. Army Tank-Automotive Command, Warren, Mich., GAO report, 17810
- manufacturing corporations, quarterly report, 3794
- medical care, source book of data through 1961, selected revisions, 15685
- men and money, human resources and financial management (address), 11053
- monetary policy and municipal finance (remarks), 9494
- opportunities and risks of financing world progress (remarks), 7210
- policies for financial balance (remarks), 2953
- political (remarks), 2955
- problems in financing scientific research work, USSR, 16745
- public facility financing, 1977
- public school finance program, 1966-67, State compilations, 17724
- receipts and expenditures of U.S.—
 - combined statement, 5611
 - monthly statement, 3580
- receipts, Federal, 1967 and 1968, estimates, 10686
- receipts, selected services, monthly report, 7490
- respective roles of monetary, fiscal and wage price guideline policies in 1967 (remarks), 1965
- revenue sharing and its alternatives, what future for fiscal federalism?—
 - committee print, 13546
 - hearings, 16149
- scientific research, effective forms of financing, USSR study, 1237
- social security benefits, financing, 7123
- State and local governments, 1965-66, employee-retirement systems, 7492
- State government, 1966 summary, 10380

Finance—Continued

statistics, Federal reserve chart book, 3315

historical supplement, 16591
time deposits and financial flow, 4791
treasury bulletin, 3976

see also Banks and banking—Credit.

Finance Committee, Senate:
additional clerical assistants, report, 4606
calendar, 3494

committee prints, 2114-15, 7803
hearings, 950-952, 6096-97, 7804-5,
12407, 13859, 15154, 16408-409
reports, 884, 901-903, 905, 911, 2094, 2099,
3097, 4534, 4596, 6086, 7787, 9271,
13775, 13797-801, 13823, 15091-93,
15104-105, 16353-358

Finance companies:
auto loan characteristics at major sales
finance companies, 792
consumer credit at consumer finance com-
panies, 3141
mid-1965, survey, 11060
sales finance companies, monthly report,
3846

Finance decisions, see Interstate Commerce
Commission.

Financial assistance, see Foreign aid—
Grants-in-aid.

Financial institutions, see Banks and bank-
ing.

Financial Management and PPBS Train-
ing Center, CSC, background, curriculum,
etc., 7547

Financial statements, see Finance.

Finch, Warren L., geology of epigenetic ura-
nium deposits in sandstone in United
States, 8167

Finchum, R. N., extended use of school fa-
cilities, 16499

Fine Arts Commission:
appropriations, 1968—
hearings, 7734, 9302
law, 12170
reports, 10560, 10766

Flaherty, Joseph M., employment and earn-
ings, and monthly report on labor force,
3232

Flies, collecting, Justice Dept. policies and
procedures, GAO review, 11154

Fink, Edw. M., chemistry, carbon compounds,
classification definitions, 18133

Fink, F. W., corrosion in hot sea water in ex-
perimental loop apparatus, 15326

Fink, Marvin P.:
aerodynamic characteristics of model em-
ploying sawing concept, 14465
aerodynamic data on large semispan tilt-
ing wing, etc., 1485, 6855, 9870, 15557

Finland:
background notes, 15755
economy, basic data, 1946
foreign trade regulations, 17481
independence, 5-cent commemorative post-
age stamp (poster), 15645
selling in Finland, 10461
USSR boundary, study, 8718

Finlayson, Rasma, State mental health plan-
ning, 1966 final reports, 17141

Finzel, Tommy L., mineral resources of
Mount Baldy primitive area, Ariz., 8156

Fins (aircraft):
internally and externally finned radiators
for Brayton cycles in space, exploratory
study, 8405
turbulent separated flows investigation in
vicinity of fin-type protuberances, 6857

Fins (cooling):
straight finned radiators, weight optimiza-
tion, design procedure, 6781

Florida externa Ferris, scale insect of hem-
lock, 17796

Fir:
balsam, botanical and commercial range in
Lake States, 8069

Fir—Continued

Christmas trees, development of planta-
tion of high quality trees, 2292
defect estimation for grand fir, Douglas-
fir in Blue Mountains of Oregon and
Washington, 2289

Douglas—
bigcone, silvical characteristics, 14143
formula for total cubic-foot volume table
from bulletin 201, 1092
labor requirements in thinning, 4837
simple, progressive improvement pro-
gram, 8081

site curves, comparison, 2309
stands, investigating dominance, 16662
dwarfmistletoe parasitizing true firs in
California, biology and pathology, 5685
forest floors and soils under true fir-hem-
lock stands, characteristics, 11139

grand and subalpine, translocation of dye
in firs infested by balsam woolly aphid,
11116

grand fir cones, maturity indices, 9534
spruce-fir clearcuttings in Colorado, stock-
ing of reproduction, 2314

true firs, possible grouse damage, 1090
white fir, winter injury among seedlings,
14107

Fire control, see Fires—Forest fires.

Fire control (gunnery):
equipment, Federal Item Identification
guides for cataloging, supplements, 3293
trainee's guide, test equipment, 7023

Fire Control and Prevention, National Com-
mission on, see National Commission on
Fire Control and Prevention.

Fire control technicians:
basic electricity, trainee's guide, 1543
electroacids, trainee's guide, 2776

Fire departments, 2d and 3d class postal
rates for volunteer fire companies, extend,
report, 694

Fire extinguishers:
carbon tetrachloride, hazards, 8151
dry chemical fire-extinguishing powders,
determining specific surface, permeability
and elutriation methods, 11678
fire extinguishing equipment, 13054
know your fire extinguishers, technical
reference, 9737

Fire-fighting apparatus:
Federal Item Identification guides for sup-
ply cataloging, supplements, 3287
motorized, current industrial reports,
4332, 10355

Fire insurance, factory mutuals, a way of
doing (address), 12129

Fire Island National Seashore, general in-
formation, 13004

Fire prevention, see Fires.

Fire protection, see Fires.

Fire resistant construction of home, farm
buildings, 15849

Fire-retardant coatings, see Coating mate-
rials.

Fire retardants, see Fires.

Fire Scan Project, see Project Fire Scan.

Fire Weather Service, National, see National
Fire-Weather Service.

Fires:
injuries, caused by, mandatory reporting
in D.C., provide, law, 480

national firearms act, code of federal reg-
ulations, 11225
prohibit use in D.C., in certain crimes,
hearings, 10644

safe use, facts, National Farm Safety
Week, 10187
small arms ammunition, identification
guide, 5738

small arms barrels, soundness require-
ments for cobalt-chromium alloy liners,
military standard, 9378
State control act of 1967—
hearings, 12306
message from the President, 16161

INDEX 1967

Firefighting vehicles:

- aircraft fire and rescue truck, 1000-gallon, guide specification, 10246
- full-scale fire modeling test studies of light water and protein type foams, 17092
- MB-5 aircraft fire-fighting and rescue vehicle, engineering observations, 9999
- Firemen (firefighters):
 - District of Columbia—
 - examination announcement, amendment, 1912
 - include members in Police Department band, report, 7687
 - retirement benefits, equalize for totally disabled, report, 9129
 - salaries, increase, law, 514
 - survivor benefits for widows of retired members, report, 10558
 - Federal employees—
 - premium compensation, correction of inequities—
 - law, 450
 - report, 915
 - retirement, include within provisions of United States Code relating to hazardous occupations, hearing, 16429
- Fireplaces and chimneys, construction, design, etc., 8825
- Fires:
 - air handling systems and fire protection, 12594
 - apartment dwelling units, field burnout tests, 18075
 - Apollo accident—
 - hearings, 6088-89, 9299, 10796, 12316, 12396
 - reports of review board, 9931, 17020
 - charring rate of selected woods, transverse to grain, 11132
 - combustibility of materials in oxygen-helium and oxygen-nitrogen atmospheres, 5708
 - emergency escape system, 6796
 - Federal Fire Council recommended practices series, 8151
 - Federal fire experience, 16679
 - fire and explosion prevention and protection, 8295
 - fire performance of wood, wood products, etc., publications, list, 14081
 - fire prevention, off the job safety, 16810
 - fire prevention program, cotton warehouse, 13237
 - fire-retardant heat insulator, dispersion of borax in plastic, 8384
 - full-scale fire modeling test studies of light water and protein type foams, 17092
 - hazard inspecting procedures in Butte County, Calif., evaluation, 14109
 - protection problems for special atmospheres, including oxygen, 17816
 - protective passenger smoke hood, aviation medical report, 14812
 - research and safety act of 1967—
 - hearings, 10825, 13715
 - reports, 14934, 15103, 16257
 - safety programs, Federal Fire Council film library, list, 14164
 - salvage of fire and water damaged records, SBA, Minneapolis, Minn., 14165
 - ships, improve protection, amendments to International Convention on Safety of Life at Sea—
 - report, 7773
 - text, 6062
- see also Forest fires.
- Firestone Tire and Rubber Co., wage chronology, 1939-66, Akron plant, 8301
- Firms, see Business.
- Firn, see Snow.
- Fiscal policy, see Finance.
- Fiscus, Clifford H., pelagic fur seal investigations, 14062
- Fish, George E., Jr., Clinton hematitic sandstone deposits, Butt Mountain area, Va., 12819

Fish and fisheries:

- Alabama landings, 3024, 16616
- Alaska, 1965, annual summary, 9512
- blood chemistry of fishes, bibliography, 17783
- California landings, 3073
- canned fishery products, annual summary, 5016, 9506
- Chesapeake fisheries, 1965 annual summary, 9504
- coastal and fresh water fishery resources, survey, report, 17628
- code of Federal regulations, 9486
- collections by exploratory fishing vessels, Oregon, Silver Bay, etc., in southwestern North Atlantic, 1956-60, correction, 9035
- commercial fisheries abstracts, 3109
- commercial fisheries, New England, 15255
- commercial fisheries review, 3110
- Communist China, Committee of Fishery Research of West Pacific, 7th plenary conference, 9626
- conservation, career preparation, 6351
- conservation notes, 15255
- conservation, protection and propagation of endangered native species of fish, law, 388
- cooperative fishery units—
 - annual report, 16626
 - program, 6347
- current fishery statistics, CFS series, 1074-75, 3024, 3073, 3335-36, 3338, 3363, 3378, 3386, 3530, 3533, 3545-46, 3553, 3564, 3621, 3628, 3638, 3830, 3876, 3884, 3924, 4038, 8013-18, 9502-13, 11072-74, 12540-544, 14054, 16610-618, 17769-771
- duty changes in fishery products resulting from Kennedy Round of GATT negotiations, 12544
- esocids, interspecific hybridization, hatching success, pattern development, and fertility of F₁ hybrids, 12551
- establish fishery zone, law, 581
- exploratory fishing and gear research, report, 2275
- fish and wildlife programs, 6348
- fish, buying guide, and recipes for school lunches, quantity amounts, 15257
- fish control investigations, 8033, 16624
- fish distribution reports, 6349
- fish, good choice for thrifty family, food value, use, recipes, 9347
- fish habitat characteristics of streams, technique for sampling, 17506
- fish passage report, Bonneville, The Dalles, McNary and Ice Harbor Dams, 13974
- fisheries, agreement with Japan, 15794
- fishery associations in United States, list, 14057
- fishery bulletins, 8020, 11077
- list, 8024
- fishery cooperatives in United States, list, 14058
- fishery industrial research, 2276, 6350, 12546
- fishery leaflets, 1076-77, 8021-24, 14057-59, 15256, 17774
- list, 8022
- fishery marketing development series, 8025-26, 9515, 15257
- fishery products—
 - imports and exports, annual summary, 1074, 16612
 - industrial, annual summary, 8015, 9507
 - packaged, annual summary, 8014
 - processed, annual summary, 11072
- fishery statistics, 14069
- Flathead Lake, Mont., 1961-64 investigations, 4811
- Florida landings, 3338, 16611
- food fish—
 - situation and outlook (periodical), 3341
 - propagation and distribution, 6349
- freezing fish in home, 31

Fish and fisheries—Continued
 fresh fish, effect of gamma rays on changes in properties, 9669
 fresh-water fish, irradiation preservation, 1784
 frozen fish, monthly report, preliminary, 3362
 frozen fishery products, 3363, 9509
 Georgia landings, 3378, 16613
 graduate educational grants for fishery research, 1965-69, 17774
 Great Lakes convention, amending agreement with Canada, report, 6064
 Great Lakes, 1965 annual summary, 9502
 Gulf fisheries, 1965 annual summary, 8018
 hatchery at Wolf Creek Dam, establish, hearing, 10665
 king crab fisheries, agreement with—
 Japan, 7185
 Union of Soviet Socialist Republics, 11857
 Louisiana landings, 1075, 3530
 Maine landings—
 annual summary, 12541
 monthly, 3533
 marking fish with dyes and other chemicals, 4812
 Maryland landings, 3545, 17770
 Massachusetts landings, 3546, 12543
 Michigan, Ohio, and Wisconsin landings, 3553, 11073
 Middle Atlantic States fisheries, 1965, annual summary, 8017
 Mississippi landings, 3564, 16615
 Mississippi River fisheries, 1965, annual summary, 9513
 monolayers for evaporation control of water, effect on insects, 7102
 more fishing space, 7292
 New England fisheries, annual summary, 9503
 New England offshore fisheries, brief history, 8021
 New Jersey landings, 3621, 12540
 New York landings, 3628, 14054
 North Carolina landings, 3638, 17771
 northeastern Pacific Ocean off U.S. coast, agreement with USSR, 11858
 northwest Atlantic, international convention of 1949, multilateral understanding, protocol, 2896
 Oregon landings, 17769
 Pacific Coast fisheries, 1965, annual summary, 9510
 packaged fishery products, 8013, 9508
 Polar Scientific Research Institute of Sea Fisheries and Oceanography, USSR, activities, 6551
 pollution-caused fish kills, annual report, 17765
 progressive fish-culturist, 3778
 cumulative subject and author index, 1081
 protein concentrate, experiment and demonstration plants, law, 415
 publications, price list, 18149
 radiation-pasteurization, 13348
 rare and endangered fish of U.S., list, 2281
 recipes—
 fancy catfish, 8025
 let's cook fish, complete guide to fish cookery, 9515
 low-calorie, seafood slimmers, 8026
 type A school lunches, quantity amounts, 15257
 research reports, 11090, 17788
 Rhode Island landings, 3836, 12542
 sanitation standards for smoked-fish processing, fish-smoking establishments, 1967 recommendations, 11759
 shrimp landings, 16610
 smoked fish plants, steps to effective sanitation, 9514
 errata, 16619
 South Atlantic fisheries, 1965, annual summary, 9505

Fish and fisheries—Continued
 South Carolina landings, 3884, 16614
 special scientific reports, fisheries series, 8035-41, 9520, 12549, 14062-66, 16627-632, 17786
 sport and commercial, estuarine areas, preserve, etc.—
 hearings, 4635, 9164
 report, 695
 sport fishery abstracts, 3891
 sport fishery research, 1966 progress, 12548
 statistical digest, 14069
 Texas landings, 3934
 toxicity of various compounds to fishes, 16624
 United States fisheries, annual summary, 11074
 USSR—
 economic-mathematical and cybernetic research at AtlantNIRO, 1202
 fishery research on Antarctic krill, 15345
 ichthyology, basic goals in current 5-year plan defined, 6522
 Vietnam, off-shore fishery development project, agreement with FAO, 17238
 Virginia landings, 4038, 16618
 water resource projects, cost sharing grants, report, 13368
 see also Diseases of fish—also names or classes of fish.
 Fish and Wildlife Service:
 circulars, 2275, 4801, 6346, 8019, 9514, 11075-76, 12545, 14055, 16619-20, 17772-773
 list, 8023
 fishery bulletins, 8020
 errata, 11077
 list, 8024
 fishery leaflets, list, 8022
 fishery marketing development series, 8025-26, 9515, 15257
 press releases, 3731
 refuge leaflets, 1078-79, 2277-79, 4803-6, 6353-55, 8027-32, 9516-19, 11079-89, 12547, 14060, 15259-265, 16622, 17775-782
 regulatory announcements, 1080, 14061, 16623
 special scientific reports—
 fisheries series, 8035-41, 9520, 12549, 14062-66, 16627-632, 17786
 wildlife series, 4809-10, 6357, 12550, 14067-68, 15268, 16633-635
 Fish as food, see Fish and fisheries.
 Fish culture, see Fish and fisheries.
 Fish disease leaflet FDI, (series), 4802
 Fish hatcheries, see Fish and fisheries.
 Fish meal:
 production—
 annual summary, 16617
 monthly reports, 3335
 Fish nets, trawl, North Atlantic, 15256
 Fish oil:
 production—
 annual summary, 16617
 monthly reports, 3335
 Fish ponds, rearing marketable channel catfish, 6356
 Fish sticks and fish portions:
 annual summary, 9511
 current fishery statistics, 3336
 Fisher, Douglas M., displacement gage for crack-extension measurements, 1513
 Fisher, H. H., crops research, Department of Agriculture, cacao clone collection, 10148
 Fisher, Joseph L., perspective on natural resources and human resources, 6597
 Fisher, Lloyd J., water-landing characteristics of model of winged missile, 9872
 Fisher County, Tex., soil survey report, 2877
 Fisheries, see Fish and fisheries.
 Fishermen protective act of 1967, report, 15008

INDEX 1967

Fishermen's and fish shore workers' unions:
list, 14059
rights in sale of fish, etc., 945
Fishery marketing development series, 8025,
9515, 15257
Fishery products, *see* Fish and fisheries.
Fishery Services Division:
annual reports, 16625, 17784
cooperative fishery units, annual report,
16626
Fishes, *see* Fish and fisheries.
Fishing, *see* Fish and fisheries.
Fishing gear, research, report, 2275
Fishing vessels:
construction for nonsubsidized fishing
fleets, hearing, 946
Miller Freeman, fishery research of U.S.,
description, etc., 11076
Oregon, Silver Bay, Combat, and Pelican,
exploratory collections made in south-
western North Atlantic, 1956-60, cor-
rection, 8035
United States, foreign seizures, amend
act—
hearing, 15045
report, 15008
Walter Herwig, West German research
vessel, description, 17772
Fishmeal, *see* Fish meal.
Fishponds, *see* Fish ponds.
Fission, *see* Nuclear fission.
Fission products, nuclides, identification for
dose calculations following reactor accident,
18349
Fissionable materials systems critical pa-
rameters, and nuclear safety, USSR book
excerpts, 15408
Fitsock, John F., wages and related benefits,
metropolitan areas, 1965-66, occupational
earnings, supplemental practices, 5056
Fitt, Alfred B., nomination, hearings, 17639
Fittings (auxiliary parts):
conduct, Federal item identification guide,
15183
Federal item identification guides for
supply cataloging, supplements, 3287
instrumentation fittings pressure testing,
portable fixture facilitates, 11458
FitzSimmons, V. G., dry-film lubricants from
molybdenum disulfide bonded with micro-
fibrous boehmite, 10001
FitzSimmons General Hospital, Medical Re-
search and Nutrition Laboratory, reports,
120-122, 5753-54, 7412-15, 10295, 14806-
807
Fix new clothes to make them last longer,
7287
Fixtures (for offices, etc.):
fixture tests bellows reliability through
repetitive pressure/temperature cycling,
11448
Flack test, 7360
Flagella, structural organization and bio-
chemical basis of movement, USSR study,
12696
Flagg, E. E., off-design performance of axial
flow turbines, 8411
Flags:
national flags and ensigns, poster, 14569
our flag, story, etc., 519
print as House document, reports,
13652, 13819
pennants and customs, naval service,
change, 18103
State flags, reproductions, 519
United States—
presentation for deceased members of
National Guard and Ready Reserve,
report, 16229
prohibit desecration—
hearings, 10661
reports, 12257, 12264
Flame photometry, *see* Photometry.
Flame proofing, household fabrics, 10177

Flames:
characteristics causing air pollution,
production of nitrogen oxides and car-
bon monoxide, 8378
flame fuels, Army technical manual, 105
flame spectroscopy analytical applications,
1800-1966, 8519
Flaming Gorge Dam, general information,
11772
Flaming Gorge Recreation Area, general
information, 15611
Flammability, *see* Inflammable materials.
Flammable fabrics, *see* Textiles.
Flammable gases, *see* Gases.
Flamsteed, AIC 75A, lunar chart, 7326
Flanges:
axially misaligned, spherical joint con-
nects, 15543
feed-thru, useful in vacuum, applications
to cryogenic temperatures, 6778
spherical pipe joint delivers loads equally
to mating flange, 6823
Flaps (aircraft):
blowing over flaps for boundary-layer con-
trol, investigation over moving ground
plane of transport model, 14477
Flashblindness, *see* Blindness.
Flathead Indians:
Confederated Salish and Kootenai Tribes
of Flathead Reservation, funds, dispo-
sition—
law, 10480
reports, 7770, 9115
Flathead Lake, fishery investigations, 4811
Flatjacks, deformation methods, deep mine
stress determinations, 6676
Flatware, stainless-steel, Tariff Commission
reports, 1646, 17255
Flavoring extracts, synthetic flavor, produc-
tion and sales, 14703
Flax, Lawrence, ultrasonic attenuation for
free electrons in presence of magnetic field,
2705
FLC, *see* Federal Library Committee.
Fleas, controlling, 5633
Fleet, *see* Merchant marine.
Fleet Marine Force, Medical Department
support, 5092
Fleet Marine Force manual FMFM series,
2533, 6624-25, 8331, 12781-782, 15460,
16839-841
Fleming, Joe W., II, nomination, hearing,
6125
Fleminger, Abraham, taxonomy, distribu-
tion, and polymorphism in Labidocera jol-
lae group, etc., 8544
Fletcher, Herman S., manual method for
control of thrust axis during planar as-
cent from lunar surface to circular orbit,
1490
Flexible liners for underground support,
5128
Files:
Baluchistan-melon fly, new plant pest,
8841
caddis, neotropical—
Mexican and Central American species,
11611
species described by Ulmer and Brauer,
5311
types of species described by Banks and
Hagen, 14542
Diptera (Anisopodidae and Bibionidae)
from Dominica, new species, 6962
Diptera, Empididae, Nerilidae, Platystoma-
tidae, Sepsidae, Muscidae, from tree tops
in Malaya, 5313
Drosophila, metabolic rate and longevity—
at different population densities, 9923
remarks and review of literature, 9925
eradication agents investigated, USSR
study, 4967
genus Harmostonia (Diptera, Dolichopodi-
dae), 12999
house fly, how to control it, 1700

Files—Continued

pine sawfly *Neodiprion excitans* Roh, description, control, etc., 11104
soldier fly larvae in America north of Mexico, 6957
Flight:
aerospace safety (periodical), 2093
alcohol & flying don't mix, 14811
blind flight instrument, non-gyroscopic, in-flight response, 141
breathing in flight, the higher you fly the less air in the sky, 8920
characteristics—
aspect-ratio-6, conical-parawing utility vehicle model, wind tunnel investigation, 5229
supersonic transport during landing approach with jet transport in-flight simulator, 12926
dynamic behavior of ballasted sphere at Mach number 0.4 to 14.5, 18029
electronic control systems, lunar-landing research vehicle, operational experience, 1496
entry flight aerodynamics from Apollo mission AS-202, 17009
fluid flight path control system, study, 16890
flying helicopters over mountains at night, guidance systems tested, 8089
free-flight characteristics of ground-effect machine, 9880
free-flight drop-test, paraglider configuration having large tapered leading edges and keel, 1475
general aviation flight plan, miscellaneous statistics, 7952
high-altitude, decompression sickness, 14778
inflight biochemical responses utilizing parotid fluid collection technique, determination, 4187
information, civil aviation, Government publications, lists, 7059
information manual, international, 3435, 10244A
amendments, 4189, 15903, 17365
information publications, dates of latest editions, 3192
inspection manual, changes, 1082, 9448, 16563
instructors, certification, Federal aviation regulations, 1040, 4758, 6239, 7949, 10991, 12494, 14005, 16554
investigation, landing task in jet trainer with restricted fields of view, 11553
low speed, V/STOL, height control requirements under visual conditions, 11524
MAC flyer (periodical), 3531
maneuver speed increases of SST configuration in relation to speed margins—simulator investigation, 16972
mechanics, application of programming to optimization problems, 11572
military manuals, prototype specification, development, 2784
of flight and bold men, 5704
performance of non-instrument-qualified light-aircraft pilots during instrument flight, stability augmentation system, effects, 11519
pitch maneuver speed margins for supersonic transport configuration with variable-sweep wing, investigation, 17000
rules, Federal aviation regulations, 2236, 7951, 10995, 12495-496, 14006
simulated altitude and aerospace flights, normal human serum parameters, 8s68
test, XV-11A aircraft, description, etc., 11997
testing of aircraft, theoretical principles and modern methods, 8509
training, air navigation, Air Force manual, change, 13254

Flight—Continued

training, under cold war GI program—
hearings, 10859
law, 16133
report, 10792
yaw coupling in turning maneuvers of large transport aircraft, 11494
see also Aircraft—Astronautics—Instrument flying.
Flight crews:
aircrew morale, factors affecting, 2d study, 4184
aircrew station vision requirements for military aircraft, military standard, 16470
aircrew survival equipmentman (PR) 3 & 2 and (PR) 1 & C, supplement, 11652
members other than pilots, certification, Federal aviation regulations, 7950, 10992
station signals, military standard, 17700
Flight engineers, written examination guide, 2282
Flight navigators, see Aviators.
Flight simulators:
F-4C, flashblindness experiment, 1738
jet transport, determination of flight characteristics of supersonic transports during landing approach, 12926
research, for investigating jet transport handling qualities and airworthiness criteria during take-off, validation, 1476
yaw coupling in turning maneuvers of large transport aircraft, study, 11494
Flight Standards Service, Maintenance Division, general practices and procedures, FAA handbook, 16560
Flint, Oliver S., Jr., neotropical caddis flies, 5311, 11611, 14542
Flint Hills, Kans. and Okla., bluestem and Osage pasture report, 14692
Flood, Daniel J., Isthmian Canal policy, etc. (addresses), 529
Flood control, see names of certain rivers.
Flood insurance, see National flood insurance.
Flood season flow, Columbia River near The Dalles, 3907
Floods:
Columbia River, flood season flow near the Dalles, 3907
control improvements, rivers and harbors, compilation—
departmental edition, 1025
document edition, 516
control, laws relating to, compilation, 1989
control, rivers and harbors—
and multi-purpose projects, public works authorizations—
law, 493
report, 698
omnibus bill, 1966, hearings, 751
emerging program for managing losses, 13162
Fairbanks, Alaska, Aug. 1967, report, 17675
flood-plain planning, information, 9567
floods and flood warnings, general information, safety rules, etc., 7936
floods of 1964 (series), 15314
hydrologic performance of floodwater retarding structures during Colorado storms of June 16-17, 1965, report, 14651
measurements of peak discharge of streams by—
indirect method, techniques, 11184, 14176
slope-area method, techniques, 11185
northwestern Montana, 15314
Nov. and Dec. 1965 in southern California, 1115
prevention, authorized watersheds, 14650
routing, SCS national engineering handbook, 10087

INDEX 1967

Floods—Continued

- United States, magnitude and frequency—
 - Missouri River basin above Sioux City, Iowa, 1129
 - Pacific slope basins in California, 11188, 14177
 - South Atlantic slope and eastern Gulf of Mexico basins, Ogeechee River to Pearl River, 2374
- waterflood performance, theoretical and field, Kane oilfield, Pa., 9769
- errata, 12814
- see also* names of rivers, etc.
- Floor coverings, 18th century America, 14530
- Floors and flooring, raised floor systems, Army technical manual, 10272
- Flora, *see* Intestinal flora—Skin flora.
- Florence County, Wis., Menominee iron-bearing district, geology, 6398
- Flores, Paul S., basic data on economy of Mexico, 14882
- Flores, Y. Marjorie:
 - clerk-hire payroll status, investigation—hearings, 4544
 - rep. rt. 4517
- Flores-Vasquez, Carlos R., relief, 10549, 13780, 14896
- Floriculture, marketing and other economic information, bibliography, 7885
- Florida:
 - census of manufactures, 1963, area statistics, 1835
 - census of mineral industries, 1963, area statistics, 5825
 - climatological data, 3096
 - conveyance of real property to, hearing, 2042
 - county business patterns, 4309, 13368
 - drilling on continental margin (series), 15311
 - east coast, lights and fog signals, list, 5331, 9972, 14578
 - eastern, coastal warning facilities chart, 8790
 - electric rate book, 11020
 - Gulf County Canal, Gulf Intracoastal Waterway, engineer report—departmental edition, 2209
 - document edition, 1998
 - landings, fish and shellfish, 3338, 16611
 - marketing vegetables, 1966 summary, 7839
 - mineral industry, minerals yearbook chapter, 5110
 - northern, Gulf Series in subsurface, 16692
 - precipitation data, hourly, 3401
 - sandhills, loss of topsoil slows slash pine seedling growth, 14119
 - seismic reflection profiles along drill holes on continental margin, 15311
 - slash pine, summer planting shows promise, 8118
 - south, slash pine—
 - comparative fire resistance of 2 seed sources, 9540
 - performance of 2 varieties, 9543
 - west coast, *Gymnodinium breve*, 1964–65, distribution and occurrence, 8039
- Florida Keys, national wildlife refuges, birds, list, 17780
- Florissant Fossil Beds National Monument, establish, report, 15005
- Florists, retail industry, graphic view, marketing and management practices, 13228
- Flomarins, *see* Sea anemones.
- Flotation:
 - continuous, of fluorspar from calcareous Illinois ore, 14339
 - hematitic ores of Marquette Range, Mich., laboratory and pilot plant development, 14335
 - methods, use for reexamination of non-magnetic taconite occurrences, 14346
 - selective, of Illinois ore, 11382
- Flotation characteristics of aircraft passenger seat cushions, 137

Flounders, radiation-pasteurization processes, 13348

Flour:

- domestic wheat flour bulletin, 3214
- export wheat flour—
- port bulletin, 3253
- price bulletin, 3254

Flour mills:

- milling industry, organization and competition, revised page, 5297
- products, current industrial reports, 3169, 14828

Flow:

- accelerated boundary layer measurements near Mach 1, 8497
- air, equations for rapid machine computation of equilibrium composition, and derivatives for flow-field calculations, 16973

airflow, high-temperature dissociated, effects of nitrogen injection into boundary layer on graphite surface, 12964

apparatus with glass glectrodes, 12734

axial-flow—

- compressor-inlet stages under high loading, aspect ratio and curvature variations, 9916

liquid-core nuclear rocket employing radiation heat transfer, heat- and mass-transfer characteristics, 14497

pump, 2-stage, with tandem-row inlet stage, blade-element performance, 11513

turbines, off-design performance, analytical procedure and computer program, 8411

boundary-reflected-disturbance lengths, determination in Langley 16-ft. transonic tunnel, 16991

characteristics of gas flowing axially through constricted arc, numerical calculations, 12955

choked inlet, characteristics for turbojet engine, 11499

cold and arc heated, gaseous core nuclear rocket mixing characteristics, simulation, 12848

concentration measurements of injected gas in supersonic stream, 8489

condensing mercury flow in 0- and 1-G environments, photographic study, 12939

coupled vibrational-dissociational flows of oxygen over wedge, effects of measured dissociation-rate constants, interpretations, 12943

electron, in low-density argon gas including space-charge and elastic collisions, 14480

exhaust, deflected, and clustered rocket engine effects, 1422

expansion and flow characteristics of initially saturated sodium, potassium and cesium vapors, 2717

fields about delta and double-delta wings, at low speeds, 6724

fluid—

- forces on sphere moving steadily along circular path in viscous fluid, 10258

in pipeline, forced discontinuous oscillations, 6912

small volume, miniature valve accurately controls, 5142

ultrasonic energy effects, in porous media, 14336

free-molecule—

- and surface diffusion through slots and tubes, summary, 8508

microscopic spheres in, drag coefficients, 11407

frequency response of forced-flow single-tube boiler, 12952

gas in chemical nonequilibrium, numerical integration methods for computing, 15568

Flow—Continued

gaseous-hydrogen system, dynamic response and application to high-frequency combustion instability, 12953
hot wire techniques in low density, flows with high turbulence levels, study, 6841
hydrodynamically rough surfaces, roughness-concentration effects, 4892
hypersonic—
free-stream atom concentration, use of self-calibrating catalytic probes to measure, 11408
transition fixing, 18011
viscous, past slender cone, 9927
incidence and Reynolds number effects on force characteristics of family of flat-front cylinders, 9903
irrotational, of frictionless fluids, mostly of invariable density, 11682
isentropic, solutions for reacting gas mixtures in thermochemical equilibrium, 16979
jet, effect on refraction of sound, 14389
laboratory studies of open-channel flow (series), 4892
laminar—
analysis of film boiling from horizontal wire, 14456
and superlaminar regimes, journal bearings, steady-state and dynamic properties, 9803, 12849
and turbulent, friction coefficients, correlation with ratios of surface bulk temperature, 17014
separations, using Crocco-Lees mixing parameter, analytical method, investigations, 9806
steady state, boundary conditions for stainless steel coiled-capillary viscosimeter, 14350
liquid-metal flow, heat-transfer analysis in rectangular channels with heat sources in fluid, 6883
local measurements in turbulent flows through cross correlation of optical signals, 8462
low rate flow switch can be used for gas or liquid, 8477
methods for predicting in shock layer over bodies at small angles of attack, 11507
nonwetting, condensing mercury flow in horizontal, sodium-potassium-cooled tubes, heat-transfer, experimental investigation, 11541
open-channel, free surface instability correlations, 4892
parametric study of advanced multistage axial-flow compressors, 11419
photographic method measures particle size and velocity in fluid stream, 6826
properties and drag coefficients family of blunt bodies, 18056
radial-flow gas generator, design and fabrication, 8409
rarefied, effect of hypersonic viscous drag on cones, 12949
rotor-inlet flow conditions, control by guide vanes, 5275
secondary jets from 2-dimensional nozzles, investigation for hypersonic control application, 5266
separated and attached boundary layers, on ablating and nonablating models at Mach 13.8, 12954
steam-water in a heated vertical channel, final report, 7430
stream, amount of contaminant in, effectively controlled by valve, 6838
superlaminar, between nonconcentric rotating cylinders, 12852
supersonic—
gas flow around blunt bodies, 12974
mixing of hydrogen and air, 9807
oscillating cone problem solved by small perturbation techniques, 6849

Flow—Continued

supersonic—continued
three-dimensional unsteady potential, flutter analysis of flat rectangular panels, 6910
wings and wing-body combinations in, integrated approach to analysis and design, 1493
tension shell configurations, investigations, 5270
test device fits into restricted access passages, 9840
thermoviscous media, propagation of waves of finite amplitude, 1434
through turbines, computer program performs, analysis, 1472
transient flow subsequent to diffraction of normal shock wave by sphere, 17015
turbulent—
drag reduction by dilute polymer solutions, 14592
magnetohydrodynamic, in prismatic and cylindrical pipes, 11571
pipe flow of Newtonian fluid, injection of drag-reducing fluid, 14398
separated, investigation in vicinity of fin-type protuberances, 6857
two-phase—
metastable state, study, 6449
pseudo-sonic velocity and pseudo-Mach number concepts, 2712
through abrupt expansions and contractions, final report, 7431
upstream discontinuities influence on acoustic power radiated by model air jet, 6714
velocities and streamlines, calculating for 2-dimensional, incompressible flow in axial blade rows, 5245
velocity measurements, tracer-spark technique, structure of spark columns in hypersonic stream, 12856
viscous, singular perturbation problems, asymptotic expansions method, 9885
vorticity meter, non-rotating, 16910
see also Vortex flow
Flow controllers, throttling elements in flow of compressible gas, USSR study, 4962
Flow of water, *see* Hydraulics
Flowers, L. C., reverse osmosis membranes containing graphitic oxide, 6444
Flowers:
demand for flowers-by-wire, 10179
growing flowering annuals, 15853
insects, control, 17307
production and sales, etc., 10108
see also Floriculture—Horticulture
Flowmeters:
circuit automatically calibrates flowmeter against liquid-level gage reference, 17986
laser Doppler, measures gas velocity, 6847
liquid-hydrogen turbine type, simulation of calibrations using high-pressure gas, 5251
low gas-flow rates, measuring and recording, 2677
measures flow rates of high temperature fluids, 2650
turbine type—
in liquid hydrogen, performance, 2728
theoretical model for determining sensitivity, 12905
use in determining mix ratio for viscous adhesives, 17988
Flue-cured tobacco, *see* Tobacco
Flue-Cured Tobacco Cooperative Stabilization Corporation, operations, hearings, 15013
Flue dust:
fly ash—
coagulant aid in water treatment, 2573
utilization, symposium, proceedings, 14329

INDEX 1967

Flue dust—Continued
germanium and gallium extraction from coal fly ash and phosphorus flue dust, 9789
Fluent handling material, *see* Handling equipment.
Fluid amplifiers:
state-of-the-art report, bibliography, 11400
use for digital computation systems, feasibility study, 12907
see also Amplifiers.
Fluid flow, *see* Flow.
Fluid logic control circuit operates nutator actuator motor, 6759
Fluid power, Navy training course, 5338
Fluid process, fluid handling, classification definitions, 18126
Fluid state hydraulic damper, 10286
Fluidic oscillator used as humidity sensor, 8473
Fluidic systems design manual, 15955
Fluidization, fluid-bed fluoride volatility process recovers uranium from spent uranium alloy fuels, 9793
Fluids:
boiling in discrete bubble region, effects of fluid properties and gravity level, 15562
cooling-lubricating, Hungarian research results in development for metal-working, 14232
electromechanical instrument continuously measures density of flowing fluids, 9844
electrostatic hazards in fluid system, test instrumentation for evaluating, 11474
equilibrium critical phenomena, 1521
fluid power, Navy training course, 5338
high temperature, flow rates, measured with flowmeter, 2650
homogeneous mixture, stationary device produces, 5221
hydraulic fluid serves as mandrel for small diameter refractory tube drawing, 5151
improved control circuit operates on low power input, 9627
injection of drag-reducing fluid into turbulent pipe flow of Newtonian fluid, 14398
non-destructive fluidic control device, research, 11409
planetary gear system to control fluid mixture ratio, conceptual stage, 5201
thermodynamic properties, calculating from empirical equation of state, 9776
see also Body fluids.
Flukes, Trematoda, index-catalog, 13205
Flumes, transport of coarse sand, 16695
Fluorescent antibodies for rickettsia detection, USSR, 12666
Fluorescent excitation using isotopic X-ray emission, 5779
Fluorescent lamps, *see* Electric lamps.
Fluoridation:
census, 13074
National Dental Health Assembly emphasis, 5449
Fluorides:
fluid-bed volatility process recovers uranium from spent uranium alloy fuels, 9793
fused-fluoride lubricant coatings, additions, for reduction of low-temperature friction, 5265
xenon, as fluorinating agents, 12836, 12839
Fluorination:
beryllium, kinetics, 12928
xenon fluorides as fluorinating agents, 12836, 12839
Fluorine:
balance, determination in electrolysis of aluminum, USSR study, 9645
fluorine and fluorine-oxygen mixtures in rocket systems, handling and use, 11425
(d, a) reactions on fluorine 19, interpretation, 9873
xenon forms stable compound, 5139

Fluorocarbons, gamma radiation effect on reaction of anthracite with fluorine and chlorine, 2585
Fluorospar:
continuous flotation from calcareous Illinois ore, 14339
Eastern States production, consumption, etc., 16853
mineral industry survey, quarterly, 3340
New Mexico deposits, 2540
production, 1966, preliminary report, 5103
selective flotation of Illinois ore, 11382
Flutter (aircraft):
comparison of panel flutter results from approximate aerodynamic theory with results from exact inviscid theory and experiment, 1480
flat rectangular panels, analysis based on 3-dimensional supersonic unsteady potential flow, 6910
flexible, towed tension shells, 9818
propeller-rotor whirl, review, 12971
towed rigid decelerators, theory and tests, 9814
Flux:
crystal microbalance measures condensable molecular fluxes, 6744
infrared radiation from air to underlying surface, 2872
Fly ash, *see* Flue dust.
Flyby measurements of profiles of water vapor, particulate matter, and carbon dioxide in Martian atmosphere, 15569
Flying, *see* Flight—Instrument flying.
FM (radio), *see* Radio frequency modulation.
FM carrier deviation measured by differential probability method, 12917
FMC SP series, 2246-47, 6258-60, 7968-72, 9456, 11016, 16577-579
FNMA, *see* Federal National Mortgage Association.
Foam:
aerobic-bacteria culture apparatus employing new foambreaker, 10007
fractionation of inorganic solutions, 12642
light water and protein type foams, full-scale fire modeling test studies, 17092
sulfur, low density, preparation of, 17379
Foam spray-dried milk, *see* Milk.
Foerster, Edward F., heat content of some blast-furnace and synthetic slags, 6675
Fog:
dispersal experiments using propane, Walla Walla, Wash., 11984
forecasting, use of atmospheric-electricity recordings, 8590
improving visibility during periods of supercooled fog, 7381
photographing water droplets to measure size, 4202
preventive compounds, military standard, 16471
project fog drops, warm fog properties and fog modification concepts, 6712
Fog signals:
Naval Oceanographic Office, list—
Baltic Sea with Kattegat, etc., 1539, 7005, 11645, 18101
British Isles, etc., 5334, 11644
Europe and Africa, west coast, etc., 1538, 5333, 11643, 18100
Greenland, etc., 5331, 9972, 14578
North and South America, west coast, etc., 1537, 7004, 11642, 18099
Norway, Iceland, and Arctic Ocean, 5335, 8572
Pacific Ocean, western, etc., 5332, 9973, 14579
Fogarty, John E., memorial services, 9030
Fogel, Sander H., address, June 16, 1966, 8045
Foley, James M., shipments of liquefied petroleum gases and ethane, 15484
Folger, John K., education of American population, 14833

Foliage, see Leaves.

Folklore, classification, Library of Congress, 5086

Folkman, William S., evaluation of fire hazard inspection procedures in Butte County, Calif., 14109

FOMC, see Federal Open Market Committee.

Fontana, Anthony, effect of planetary albedo on solar orientation of spacecraft, 16985

Food:

additives, FDA's life protection series, 9522

affiliated wholesalers, comparison of financial operating data, 4123

anticipating year 2000 (address), 15844

Army adviser, technical manual, 14802

background on farm and food prices, 15845

bacteriological examination of utensils, etc., procedure, 17164

buying, how to use USDA grades, 5671

code of Federal regulations, 6276-79

consumption, households in United States, spring 1965, preliminary report, 15826

daily guide, some choices for thrifty families, 7837, 9333

donated for distribution abroad—

processing claims against voluntary relief agencies for loss on misuse, GAO report, 12589

transportation costs, GAO review, 9550

donation programs administered by non-profit voluntary relief agencies, extent of audits, GAO report, 8149

East European industries, translations, 3954

family stockpile for survival, 1697

farm food marketing bill and its components, 6170

fish, situation and outlook (periodical), 3341

food and agriculture act of 1965, amend, report, 15087

food and fiber for future, report, 13063

food and fiber in Nation's politics, 17123

food and people, what we can do (remarks), 1694

food and your weight, 14744

food costs, farm prices, information relating to agriculture, 13694

food, drug, and cosmetic act—

amended, text, 1083

enforcement and compliance, FDA report, monthly, 3268

requirements guide for foreign manufacturers, etc., 17790

food for fitness, daily guide, 10175

food for freedom—

monthly news report on activities under PL 480, 3342

program (address), 26

food for peace act of 1966, law, 512

food for progress in Latin America, report, print additional copies, report, 12241

food for the young couple, 15852

food service management, Air Force manual, 8857

food we eat, 7279

fortified foods, special dietary foods, FDA fact sheet, 6359

freezing, combination main dishes, 17313

fresh rapid decomposition and exposure near vacuum conditions, 1735

gamma irradiated, effect on monkeys, USSR study, 6571

Government-donated distribution in Pennsylvania, GAO report, 6381

grade names used in USDA, list, 14737

help developing countries to increase production, picture story, 17332

home canning, helpful Government publications, list, 15673

how safe is our food? 9523

hunger is ahead in race between hunger and hope, picture story, 17331

import detentions, report, 3820

Food—Continued

India, increasing supply—

hearings, 7792, 9138

law, 9037

reports, 7783, 9083, 9085

India, to stave off threat of famine, proposal that U.S. join international group to help, message from the President, 5996

Irradiation—

check list of cost considerations (address), 5807

food products, installation for, USSR study, 9663

program, review, hearing, 1975

radiation preservation, conference, 15318

radiation preservation, developing technology of irradiation (remarks), 4242

radiation preservation symposium, 1783

selected products in Atomic Energy Commission's low-dose program, cost-benefit study, 10302

6th annual AEC contractors' meeting, 5768

Latin America, food for progress, report on agricultural development, 13701

manufacturing, structure, report, erratum, 5298

marketing industries, recent and prospective structural changes, 988

marketing, special studies, errata, 9947

national food buyers quiz, questions and answers, 963

national food situation, 3596

needs and U.S. agriculture in 1980, analysis of land, labor and capital requirements, etc., 17122

new food aid program, general information, 4127

nonperishable, savings attainable in use and pricing, Defense Dept., GAO report, 2352

nutritious food on emergency basis to any individual to prevent human suffering, provide—

hearing, 17587

report, 15080

operations reference manual, increments, 15640-641

organizing food training program, 17722

perishable, storing in home, 13225

pesticides, residues in food, report, 15274

plentiful food, PF series, 3690

potential of world (remarks), 1695

preparation and serving equipment, Federal Item Identification guides for supply cataloging, supplements, 3292

preparation and serving in garrison mess, Army technical manual, 7397

preservation of foodstuffs by sublimation method, USSR study, 12665

price changes, investigation (statement), 52

prices, what makes food prices? 2173

private labels, frequency of use by distributors, errata, 9947

products—

marketing bill, 987

United Arab Republic import market, 1947

protection, environmental health training program research grants, 5463

publications, price list, 17132

retail prices by cities, 3245

retailers, encourage your low-income customers to take part in food stamp program, 17330

retailing by discount houses, 5652

retailing, what retailers should know about perishable agricultural commodities act, 8843

sample menus and food list for week based on USDA economy family food plan, 10157

science and food for freedom, 18217

INDEX 1967

Food—Continued

- service employees under fair labor standards act as amended, 7225
- service in institutions in East and Midwest, 11935
- situation in United States (address), 30
- standards, Codex Alimentarius Commission, U.S. delegates, etc., 2136, 9353
- storing at home, aid to extension and village workers in many countries, 14022
- travel a new world of food, see the U.S.A., 17279
- French edition, 17275
- German edition, 17278
- Portuguese edition, 17276
- Spanish edition, 17280
- United States, food and fiber system in changing world environment, 18144
- USDA standards, list, 13215
- wholesale food distribution facilities—
 - Baltimore region, 5650
 - Chicago, 7278
 - Huntington, W. Va., 4
- wild animals as source, 4810
- world needs (paper), 16496
- world problem—
 - address, 7258
 - President's Science Advisory Committee reports, 11706-707
- world situation—
 - address, 30
 - prospects for grain production, consumption, and trade, 15209
- world supply, panel reports, 11706-707
- young scientists look at food, nutrients, etc., 12561
- see also Canned foods—Menus for space flights—School lunches—also names of foods.
- Food additives:
 - chemistry and technology requirements of food additive petitions, FDA guidelines, 2285
 - FDA's life protection series, 9522
- Food and Agriculture Organization of United Nations, off-shore fishery development project for Vietnam, agreement, 17238
- Food and Drug Administration:
 - FDA fact sheet, 6359
 - FDA investigator, career opportunities, 11095
 - FDA papers (periodical), 4814
 - FDA publications, 4815, 6360, 8045, 12561-562, 14074, 15272, 17790
 - FDA report on enforcement and compliance, monthly, 3268
 - FDA's life protection series, 9522-23, 12561-562, 15272
 - guidelines for chemistry and technology requirements of food additive petitions, 2285
 - how FDA works for you, 4815
 - laboratory sites, selection procedures, hearings, 15032
 - opportunities for—
 - chemists, 11093
 - clerk typists and stenographers, 8046
 - inspectors, 11094
 - microbiologists, 11096
 - poster series, 16639
 - radio-TV packet (periodical), 3804
- Food and Fiber, National Advisory Commission on, see National Advisory Commission on Food and Fiber.
- Food, drug, and cosmetic act, see Cosmetics—Drugs—Food.
- Food for fish:
 - Abernathy salmon diet, test of components, 16636
 - caloric and vitamin levels of salmon diets, studies, 8042
 - channel catfish fingerlings response to different levels of nutrients, 8042
- Food for livestock:
 - cattle diets on native and seeded ranges in ponderosa pine zone of Colorado, 6369

Food for Livestock—Continued

- feed market news, weekly, 3330
- feed situation, 8331
- feed statistics through 1966, feed grain, corn, etc., 17333
- forage fed to milk cows, 11880
- livestock-feed relationships, 1909-65, supplement, 1720
- malnutrition of young cattle, effect on feed utilization, etc., 14765
- medicated feeds, use carefully and wisely (poster), 16639
- milk cows, roughage fed, 1966 summer season, 2940
- Food for poultry, collective bargaining groups for feed prices in California, 7944
- Food lockers, see Cold storage.
- Food preservation, see Food.
- Food processing, meat products, new technological methods, 6546
- Food sanitation inspectors, standardization and certification, PHS recommendations, 17159
- Food Services Department Central Management Office, D.C., see Central Management Office of Food Services Department, D.C.
- Food stamps:
 - act of 1964, amend to extend program—
 - hearings, 9159, 10802
 - law, 17545
 - reports, 9119, 10598, 13790, 16251
 - Agriculture Department's program, method for sharing our abundance, 5669
 - food stamp program—
 - guide for retailers and wholesalers, 4130
 - retailers, encourage your low-income customers to take part, 17330
 - statutes, compilation, 7262
- Food stores, see Stores.
- Foot-and-mouth disease, menace to North American livestock, control and eradication progress, 7252
- Football:
 - professional teams, authorize merger of leagues and protect secondary schools from professional football telecasts—
 - hearings, 742
 - law, 504
 - law, legislative history, 2064
 - law, summary, 4566
 - Senate amendments, summary, 4568
 - Footwear, see Boots and shoes.
 - For you from a grateful nation, 18250
 - Forage plants:
 - deer browse resources of Uwharrie National Forest, 8124
 - feed statistics, 17333
 - fertilization uneconomic for forage improvement in Louisiana pine plantations, 14117
 - fluctuations in forage quality on summer range in Blue Mountains, 16663
 - forage and range research, challenges, 14753
 - forage fed to milk cows, 1966-67 winter feeding season, 11880
 - insecticide residues, results of analyses, 3803
 - periodic mowings suppress tamarisk growth, increase forage for browsing, 6368
 - wheat pasture, 4063
 - Foraminifera:
 - Gulf of Alaska and southeastern Alaska, recent samples, 12614
 - smaller, from Guam, 1119
 - see also Fusulinidae.
 - Force and energy:
 - decreasing stacking-fault energy, possible relation with friction of copper-aluminum alloys, 8490
 - energy absorbing steering control system for automotive vehicles, Federal standard, 6318
 - force investigation of supersonic transport model with highly swept arrow wing, 12924

Force and energy—Continued

forward compartment energy absorption for automotive vehicles, Federal standard, 6316

hydrostatic force used to handle outsized, heavy objects, 12897

zero force reaction in use of hole saw drill attachment, 6767

Forced labor, abolition, convention, hearings, 7806, 16410

Forces deforming rib cage, 10238

Ford Foundation, proposal for broadcasters non-profit satellite service, hearings, 2111

Ford's Theatre, general information, 11613

Fore, Paul L., cumulative subject and author index to Progressive fish-culturist, 1081

Forearm vascular responses to lower body negative pressure and orthostasis, 4175

Forecasts:

long-range forecasting and planning, Air Force symposium, 17340

long term, supply and demand of agricultural and livestock products in Venezuela, summary and evaluation, 12456

see also Weather forecasts.

Forecasters, see Weather forecasts.

Foreclosure of mortgage, see Mortgages.

Foreign activities of national banks, 8004

Foreign affairs, see International relations.

Foreign Affairs, Committee, House:

activities, 89th Congress, 4536

calendar, 3475

committee prints, 733-734, 4534-36, 6106, 7743-44, 7746, 9158, 10651-653, 12297, 13704

hearings, 730-732, 4533, 7745, 7747, 9155-57, 10623, 10649-650, 12298-300, 13705, 15027, 16326

investigations and studies, U.S. foreign policy—

authorization, report, 7663

expenses, reports, 639, 7725

reports, 4493, 6024, 7715, 9104, 9131, 10568, 10623, 12285, 14960

Foreign agents, registration act, administration, report, 16790

Foreign Agricultural Service:

appropriations, 1968, hearings, 10629, 12397

biographic register, 14670

market promotion activity, review, report, 10615

miscellaneous, FAS-M series, 1084, 2286, 4816-17, 8047-48, 9524-25, 11097-99, 12565, 14076, 16041-643, 17792

special reports, list, 1085, 8049, 14077

Foreign agricultural trade, see Agricultural products.

Foreign agricultural trade of United States, 3343

Foreign agriculture, see Agriculture.

Foreign agriculture (periodical), 3344

Foreign agriculture circulars, 3345

Foreign aid:

agricultural development, monthly newsletter to cooperators, 3432

Colombia projects, planning and supervision by AID, GAO review, 16677

development digest (periodical), 3202

economic assistance—

administered by AID, 6468

financial summary, 16725

Vietnam, off-shore fishery development project, agreement, 17238

essential element of United States foreign policy (address), 18231

excess property, control and use, etc., following U.S. military exclusion from France, hearings, 16327

expenditures, study, authorization, report, 4626

food aid program, new, general information, 4127

foreign assistance act of 1961, amend—

analysis of bill, 10653

development of cooperative enterprises, 1966, report, 13700

Foreign aid—Continued

foreign assistance act of 1961, amend—

continued

hearings, 9157, 10649, 12299, 13861, 15027

Ramseyer rule print of bill, 10652

reports, 13837, 14960, 14973

foreign assistance act of 1966, Ramseyer rule print, 733

foreign assistance act of 1967—

analysis, 10653

hearings, 9157, 10649, 12299, 13861, 15027

message from the President, 6000

Ramseyer rule print, 10652

reports, 13837, 14960, 14973

foreign assistance act of 1968, background material, fiscal year 1968, compilation, 12297

foreign assistance appropriations, 1967, law, 405

foreign assistance appropriations, 1968, hearings, 15014, 16304

foreign assistance program—

authorizations and appropriations, 1965, staff memorandum, 4534

authorizations and appropriations, 1966-67, staff memorandum, 4535

India, economic development projects, planning and surveillance by AID, GAO report, 16669

International Development Agency, operations report, 3659

programs, proposals for implementing 6 guiding principles, message from the President, 6000

proposed foreign aid program, fy 1968, AID, summary presentation to Congress, 11230

South Vietnam, free world assistance, 8716

technical cooperation, agreement with—

Afghanistan, 5532, 7164, 15768

Somali Republic, 7181, 13147

United States economic program in Vietnam, illicit practices affecting, follow-up investigation, report, 14996

United States foreign aid in action, case study, 2122

voluntary programs, reports of American registered agencies, 2419, 12655

see also names of countries.

Foreign assets control regulations, commodity supplement, 8774

changes, 17268

Foreign assistance, see Foreign aid.

Foreign claims, see Claims.

Foreign Claims Settlement Commission:

appropriations, 1967, law, 501

appropriations, 1968—

hearings, 10632, 16390

reports, 10616, 16372

international claims settlement act of 1949, text of title 5, 8051

reports, semiannual, 6362, 12566

Foreign commerce, see Commerce.

Foreign commercial markets, talk, 4818

Foreign countries:

bank operations of U.S. abroad, foreign government restraints, economic policies and practices, 8045

consular offices in United States, 10097

country report series, 6417-21

designations used in compiling U.S. foreign trade statistics, code classification, schedule C, 4358

change, 5849

economic data for less developed countries, 4924

economics of agriculture and U.S. foreign agricultural trade, selected list of publications, 993

family planning programs in developing countries, 8227

fees charged for visa of United States passports, list, 7145

INDEX 1967

Foreign countries—Continued
 foreign assets control regulations, commodity supplement, 8774
 changes, 17208
 foreign tax credit claimed on corporation income tax returns, 11224
 gifts and decorations, acceptance by government officials and employees, establish basic uniform standards—
 law, 391
 Ramseyer rule print, 734
 government securities, purchase by Federal reserve banks—
 hearing, 7500
 report, 9281
 international business practices, 9602
 living costs abroad, Department of State Indexes, 5084
 marking of country of origin on U.S. imports, 7842
 nation building and peace building (address), 14209
 passenger travel to and from U.S., 3822, 4910, 12633
 plant quarantine import requirements, summaries, list, 4087
 profiles of newly independent states, 11826
 seizures of United States fishing vessels, amend act—
 hearing, 15045
 report, 15008
 small arms ammunition, identification guide, 5738
 social security programs throughout world, 8692
 statistical briefs, 3898
 statistical publications, accession list, 3350
 world's nations, status, geographic nomenclature, etc., State Dept. geographic bulletin, 17222
see also Foreign agents—also subjects involved
 Foreign Credit Insurance Association, insurance, 6232
 Foreign currencies, *see* Money.
 Foreign decorations, *see* Decorations of honor.
 Foreign exchange:
 rates, monthly, 3346
 rates, weekly, 3347
 Treasury and Federal reserve operations, 8005, 16599
 Foreign Labor and Trade Office, program and publications, 6619
 Foreign language specialists, examination announcement, discontinuance notice, 5930
 Foreign languages, *see* Language and languages.
 Foreign market reports service, listing, 12653
 Foreign policy, *see* International relations.
 Foreign relations, *see* International relations.
 Foreign Relations Committee, Senate:
 calendar, 3495
 committee prints, 2116, 4637, 6098, 6104, 6106, 7808-10, 9311, 10830, 10835, 10837, 12408, 13860, 13862
 consultative subcommittee, list and scope of coverage, 10830
 hearings, 953-954, 6099, 6100-3, 6105, 6107, 2806-7, 9312-13, 10831-834, 10836, 13861, 13863, 15155, 16410, 17650-653
 investigations and studies, U.S. foreign policies, authorization, report, 4627
 reports, 897, 904, 2090, 2092-93, 2096, 6064-67, 7774-75, 9187-90, 9270, 9272, 9295, 10728, 10742, 10757, 10767-768, 12586-387, 13726, 13795, 13837, 15064, 15102, 16352, 17619-620
 Foreign Service
 American officials and their families, social usage abroad, guide, 8712
 annuities, increases and adjustments, report, 13795

Foreign Service—Continued
 benefits for employees in high-risk situations, report, 10768
 biographic register, 14670
 briefing, 18227
 career, general information, 10098
 country team, illustrated profile of American missions abroad, 8711
 department and foreign service series, 2879, 8711-12, 10096-98, 14670-671, 17217, 18226
 emergency situation, additional benefits, report, 9295
 former officers of State Department, payment of severance benefits, GAO report, 4873
 list, 3349
 officers, key, of foreign posts, guide for businessmen, 3462
 overseas opportunities for secretaries, 8722
 posts, records in National Archives, special list, 14511
 retirees, prospective, general information for, 8721
 travel regulations, revision needed to reduce per diem costs, GAO report, 15298
 Foreign Service Information Officers Corps establish, hearing, 17653
 Foreign Service Institute:
 basic course—
 French language, supplementary exercises, 14675
 Greek language, 14677
 spoken Brazilian Portuguese, 2884
 Vietnamese language, 10106
 pronunciation and lessons guide, 7195
 programmatic course, Spanish language, 14682
 instructor's manual, 13142
 Foreign students in United States, 5613
 Foreign trade, *see* Commerce—also names or classes of commodities.
 Foreign Trade Zones Board, annual report, 11100
 Foreman, B. J., advanced antenna techniques for rendezvous radar, 11403
 Forest conservation, *see* Forests and forestry.
 Forest fires:
 bibliography of publications by Forest Service, forest fire research staff, etc., 8052
 comparative fire resistance of 2 seed sources of south Florida slash pine, 9540
 cooperative control program financing, Federal, State and private funds, 9527, 15276
 Federal plan for National Fire Weather Service, 9432
 fire control—
 air operations facilities needed in major disasters, OEP report, 10702
 print as Senate document, report, 10783
 seasonal employment information, 2524
 State laws, analysis, 9526
 fire control notes (periodical), 3334
 forest floor fuels in red and jack pine stands, 2803
 fuel weight and removal costs in fuel-break construction, 8082
 Project Fire Scan, fire detection by airborne infrared mapper, report, 8106
 protection of State and privately-owned land within national forest areas, 4861
 publications on forest fire research since 1960, Northern Forest Fire Laboratory, Missoula, Mont., 8058
 retardants, reproducible system for evaluating, 15288
 spread characteristics determined in laboratory, 4847
 spread mechanisms, research progress report, 2329
 statistics, 15277

Forest fire
 who state
 8076
 Forest H
 titled n
 been re
 one ye
 Forest n
 Forest n
 8125-2
 Forest p
 105, 12
 Forest pl
 and se
 brush
 pond
 redced
 hick
 shortle
 on l
 Ozar
 tree pl
 Forest p
 deman
 insect
 nation
 est r
 repo
 utiliza
 woo
 Forest P
 annual
 public
 fire
 mod
 al
 8
 san
 woo
 woo
 Forest p
 annou
 Forest r
 Forest r
 Forest r
 annual
 appro
 hea
 law
 rep
 cartoo
 tory
 emplo
 field o
 films
 list
 forest
 not
 Intern
 tion
 land
 t
 hea
 rep
 lands
 152
 need
 use
 age
 sale
 outdo
 125
 poster
 reser
 45
 131
 196
 reser
 56
 125
 664
 resou
 812
 wome
 132

Forest fires—Continued
 who starts forest fires in Maine—and how? 8078
 Forest Haven, voluntary admission of certified mentally retarded patients who have been resident of District of Columbia for one year, report, 7703
 Forest lands, see National forests.
 Forest nurseries, tree planters' notes, 1099, 8125-27
 Forest pest leaflets, 4820-21, 9529, 11104-105, 12507, 15278, 16646-647, 17793-796
 Forest planting:
 and seedling, 1966 report, 8127
 brushfield reclamation, reforestation with ponderosa pine, 4844
 redcedar mixtures established in poor oak-hickory forests, 8073
 shortleaf pine seedling inventory methods on broadcast-seeded areas in Missouri Ozarks, 8072
 tree planters' notes, 1099, 8125-27
 Forest products:
 demand and price situation, 5660
 insecticides, guide, 10162
 national surveys of timber and other forest resources, cost limit increase ceiling, report, 10749
 utilization and marketing assistance for woodland owners, etc., 1714
 Forest Products Laboratory:
 annual report of research, 14079
 publications, lists, 11106
 fire performance, 14081
 modified woods, paper-base laminates, and reinforced plastic laminates, 8054
 sandwich construction, 9530
 wood finishing, 14082
 wood preservation, 14083
 Forest products technologists, examination announcement, 4394
 Forest research, see Forests and forestry.
 Forest resources, see Forests and forestry.
 Forest Service:
 annual report, 16653
 appropriations, 1968—
 hearings, 7734, 9302
 law, 12170
 reports, 10560, 10766, 12252
 cartographic records, preliminary inventory, 14510
 employment, nonprofessional, guide, 10184
 field offices, listings, 1086
 films available for educational purposes, list, 12569
 forest fire research staff, publications, annotated bibliography, 8052
 Intermountain region yearbook, 1966, national forests in profile, 15280
 land exchanges for public schools, facilitate—
 hearings, 16303
 report, 16275
 lands, in U.S., recreation use estimation, 15284
 need to resolve differences in procedures used by Federal timber management agencies in appraising timber offered for sale, GAO report, 4871
 outdoor recreation research, bibliography, 12568
 poster, 16648
 research notes, 1088-93, 2297-2326, 4826-45, 6365-70, 8059-99, 9533-40, 11110-131, 12570-583, 14087-122, 15281-286, 16654-660, 17801-804
 research papers, 1094-98, 2327V34, 4846-56, 6371, 8100-20, 9541-44, 11132-141, 12584, 14123-145, 15287-289, 16661-664, 17805-806
 resource bulletins, 2335-39, 4857-60, 8121-24, 14146, 16665-666, 17807, 809
 women's work in, career opportunities, 13281

Foresters:
 aerial photo interpretation, guide, 4097
 examination announcement, 16078
 amendment, 3984
 research, examination announcement, 4394
 Forestry, see Forests and forestry.
 Forestry Science Laboratory, Morgantown, W. Va., purpose, work, etc., 14084
 Forests and forestry:
 aerial photo interpretation, forester's guide, 4097
 Alaska interior, forest types, photo identification guide, 15287
 Arizona's forests, 2335
 California, commercial forest area and timber volume, 4859
 careers in forestry, 5654
 careers in research forestry, examination announcement, 4394
 cattle in woods or woods in pasture, 14093
 compound interest tables for long-term planning in forestry, 13212
 conservation, materials to help teach, list, 6565
 Del Norte County, Calif., forest statistics, 4860
 destructive Alaska forest insects, identification, 14085
 disposal of logging slash, thinnings, and brush by burying, 4839
 East European forestry, translations, 3954
 effects of slash burning on conifer regeneration in southeast Alaska, 4834
 elementary statistical methods for foresters, 7260
 forest floors and soils under true fir-hemlock stands in Cascade Range, characteristics, 11139
 forest industries in eastern Washington, 8123
 forest inventory statistics, Campbell County, Tenn., 18239
 forest resources—
 and industries in Tennessee Valley, 10116
 New Mexico, 2335
 forested loess soils after repeated prescribed burns, properties, 8091
 forestry accomplishments in southwestern Ohio under U.S. agricultural conservation program, 14135
 forestry bulletin, Tennessee Valley Authority, 18239
 forestry research progress, 1966, McIntire-Stennils cooperative program, 13902
 forestry schools in U.S., list, 4822
 forests forever, 2290
 Georgia, north, industry outlook, 1650
 herbicides for forest plantations, 12571
 industries—
 Appalachia counties of Tennessee, 16666
 Pacific Northwest, production, prices, employment, and trade, 3774
 insects, conditions in—
 Pacific Northwest, 8053
 United States, 9528
 job stability, community prosperity and our forests (address), 13209
 labor requirements in thinning Douglas-fir and western hemlock, 4837
 laws relating to, compilation, 1989
 long-term forestry investments, computer program for evaluating, 14131
 managing your woodlands, how to do it guides, 2292
 Northeastern forest-inventory data-processing system, 11134
 outdoor recreation and associated research needs for suburban forests, 7888
 outdoor recreation research, bibliography, 12568
 ranger arithmetic for—
 1st and 2d grade teachers, 2293
 3d grade teachers, 2294

INDEX 1967

- Forests and forestry—Continued
 ranger arithmetic for—continued
 4th grade teachers, 2295
 5th grade teachers, 4825
 6th grade teachers, 11105
 7th grade teachers, 2296
 research notes, 1088-93, 2297-2826, 4826-45, 6365-70, 8059-99, 9533-40, 11110-131, 12570-583, 14087-122, 15281-286, 16654-660
 research papers, 1094-98, 2327-34, 4846-56, 7371, 8100-20, 9541-44, 11132-141, 12584, 14123-145, 15287-289, 16661-664, 17805-806
 resource bulletins, 2335-39, 4857-60, 8121-24, 15290, 16665-666, 17807-809
 road to forest management, 1652
 scientific research coordination in Socialist countries, 7th conference, report, Hungarian study, 14242
 seasonal employment information, 2524
 seed fall and regeneration from group selection cut, 1st year results, 4840
 silvical characteristics—
 Monterey pine, 8113
 redwood, 4853
 slash and litter weight after clearcut logging in 2 young-growth timber stands, 8087
 slash-burn agriculture among mountain tribes of central Vietnam, 14246
 slash decomposition, laboratory tests fail to confirm acceleration by chemical treatment, 8086
 snow cover and calculation of snow floods, USSR study, 1203
 State and private forestry, southeastern area, 17798
 tax trends in Louisiana, 8009
 western forests, aerial photographic techniques for estimating damage by insects, 14078
 woodland owners, forest products utilization and marketing assistance, 1714
see also Forest fires—Forest planting—National forests—Site indexes—Timber—Trees—Volume and yield tables—*also* names of forests.
 Forfeitures, collecting, Justice Dept. policies and procedures, GAO review, 11154
 Forgings:
 aluminum, notice to trade, 10332
 gears with integral teeth, high energy rate system evaluation, 8898
 steel, current industrial reports, 3169
 Forman, B. J., diode-iris controlled waveguide slot radiators, 9812
 Formic acids, description, etc., technical reference, 9740
 Forms (concrete construction), *see* Molds (forms).
 Forms, blanks, etc.:
 index of AMC blank forms, 95, 5721, 10251, 13289, 15927
 sheet sizes and hole-punching data for filler paper and forms bound in ring, post and prong binders, military standard, 9374
 standard forms, GSA stock catalog, 16607
see also names of departments, etc., issuing or using forms—*also* subjects.
 Forsterite, thermodynamic properties, 11387
 Forsythe, Gordon J., reclamation era, 3810
 Fort, E. F., relief, 7632
 Fort, W. R., relief, 7632
 Fort Caroline National Memorial, general information, 8555
 Fort Donelson National Military Park, general information, 13005
 Fort Huachuca, Ariz., STRATCOM new headquarters, 6155
 Fort Huachuca Military Reservation, nutrition survey, 14807
 Fort Lyon Veterans Hospital:
 real property, retrocede jurisdiction to Colorado—
 law, 368
 report, 898
 Fort Madison, Iowa:
 Mississippi River, navigation project, engineer report—
 departmental edition, 4733
 document edition, 4470
 Fort Payne, Ala., bauxite deposits, 2356
 Fort Peck Game Range, *see* Charles M. Russell National Wildlife Range.
 Fort Peck Indian Reservation:
 tribal land, transfer of title—
 law, 12166
 reports, 10579, 12361
 Fort Pulaski National Monument, general information, 13006
 Fort Stockton, Tex., brackish well water reverse osmosis tests, 11217
 Fort Valley Experimental Forest, ponderosa pine, racial variation, 2315
 Fort Wayne, Ind., population, special censuses, 10378, 16018
 Fort Worth, Tex., area wage survey, 8307
 Fortenberry, W. H., story of cotton, 15858
 Fortney, Sidney, R.:
 effect of hydrazine on liver glycogen, arterial glucose, etc., in anesthetized dog, 7359
 effect of monomethylhydrazine on methemoglobin production in vitro and in vivo, 14773
 Fortran, *see* Electronic data processing systems.
 Fortune magazine, directory of 500 largest U.S. industrial corporations, 1954-65, concentration and divisional reporting, etc., hearings, 12415
 Forward compartment energy absorption for automotive vehicles, Federal standard, 8316
 Forwarders, *see* Freight forwarders.
 Fosberg, Michael A., some characteristics of 3-dimensional structure of Santa Ana winds, 4855
 Foshag, William F., aerodynamic testing of airborne lightweight high-efficiency radial fan, 10292
 Foss, Murray F., survey of current business, 3925
 Foss Reservoir, repayment contract, amend to provide for water treatment plant, hearing, 15160
 Fossils:
 contributions to paleontology (series), 16699
 fossil marine mammals from Miocene Calvert Formation of Maryland and Virginia, 1530
 Foster, Helen L., geology of Mount Fairplay area, Alaska, 12589
 Foster, John S., testimony, 7808
 Foster-home care, *see* Child placing.
 Foundations (charitable and educational), *see* Charitable institutions.
 Foundations (construction):
 farm buildings, 17310
 grouting, field technique and inspection, engineering and design manual, 2211
 post-stressed concrete, may reduce machinery vibration, 15489
 procedure for design of buildings and other structures, Army technical manual, 10276
 public buildings, subsurface exploration for and design and construction, GAO, review, 11156
 Founding metal founding classification definitions, 11684
 Foundries:
 copper-base products, current industrial reports, 3170
 iron and steel, current industrial reports, 4329

Foundries—Continued

steel casting and foundry work in USSR, 1224

Fountain, James B., prepackaging pears at shipping point, 1703

Four Corners Economic Development Region, dedication (remarks), 4449

Four Corners Regional Commission, Federal Cochairman, nomination of Orren Beaty, Jr., hearing, 13883

Four educational opportunities for occupational therapy students, 8899

4-H clubs:

clothing projects, abilities of girls 9 to 13, 48

entomology leaders' guide, 4134

this is 4-H, general information, 15867

Fourier coefficients, *see* Coefficients.

Fourier transforms, *see* Transformations (mathematics).

Fourth dimension, 7382

Fourwing saltbush, *see* Saltbush.

Fowl ticks, control, 1699

Fowler, A. K., electronic method for counting and sizing rabbit spermatozoa, 11954

Fowler, Henry H.:

remarks, etc.—

Oct. 22, 1966, 1653

Nov. 14, 1966, 1657

Nov. 16, 1966, 2956

Nov. 18, 1966, 1655

Nov. 25, 1966, 2957

Dec. 3, 1966, 2954

Dec. 6, 1966, 2952

Dec. 7, 1966, 2950

Feb. 6, 1967, 5573

Feb. 16, 1967, 7213

Feb. 21, 1967, 7212

Mar. 15, 1967, 8775

Mar. 17, 1967, 8777

Apr. 10, 1967, 8776

Apr. 20, 1967, 10124

Apr. 24, 1967, 10121

Apr. 28, 1967, 10120

May 13, 1967, 11883

July 18, 1967, 14709

Sept. 21, 1967, 17272

Sept. 26, 1967, 17271

Oct. 28, 1967, 18243

Fowler, Laurie G.:

studies of caloric and vitamin levels of salmon diets, 8042

test of different components in Alberathy salmon diet, 16636

Fowler, P. R., problems in aerial application, detection of mild poisoning by pesticides, etc., 13351

Fox, Austin, demand for farm tractors in United States, regression analysis, 2169

Fox, Lawrence A.:

addresses, etc.—

Nov. 22, 1966, 2418

Nov. 1, 1967, 13854

Fox, R. B., photodegradation of high polymers in solution, poly (methyl methacrylate), 5358

Fox Indians, *see* Sac and Fox Indians.

Foxvog, Donald R., FAA aviation news, 3257

FPC, *see* Federal Power Commission.

FPC R series, 4770-71

FPC series, 2247, 7973, 11017, 12508, 17760

FPL, *see* Forest Products Laboratory.

Fra Mauro, AIC 76B, lunar chart, 7329

Fractionation:

continuous flow in-line exchange of volatile solvents in automated chemistry, 75

Inorganic solutions, by foaming, 12642

Fracture of metals:

crack growth—

flat and curve surfaces at cryogenic temperatures, continuity gage measurement, 2721

measured on flat and curved surfaces at cryogenic temperatures, 17992

crack propagation theories, 17939

Fracture of metals—Continued

crackline-loaded edge-crack specimens, stress intensity factors, 6869

fatigue crack growth in Ti-3Al-1Mo-1V (duplex-annealed) specimens having various widths, investigation, 8494

fracture toughness of wide 2014-T6 aluminum sheet at -320°F, 12936

hydrogen embrittlement of ultrahigh-strength steels, study to minimize, 11470

low cycle fatigue of notched specimens by consideration of crack initiation and propagation, 12921

meteoroid damage to filamentary structures, 16899

neutron embrittlement of—

higher strength steels, 5356

reactor pressure vessel steels, exposure criteria, 5355

plane-stress, elastic-plastic states in vicinity of crack tips, 9516

plastic constraint ahead of sharp crack under plane-strain conditions, 7103

radiation embrittlement of Army SM-1A reactor pressure vessel, projected estimates, neutron spectral effects, 1554

residual strains and displacements within plastic zone ahead of a crack, 5489

stress-corrosion cracking of Ti-6Al-4V alloy in methanol, 6900

stress corrosion cracks in titanium alloys revealed by chemical milling solution, 16957

stress distributions in vicinity of simulated crack, photoelasto-plastic method to study, 8406

stresses at tip of longitudinal crack in plate strip, 14498

titanium alloys, salt water stress-corrosion cracking characteristics, 17091

titanium, aluminum, and stainless steel alloys in aqueous environments, crack propagation, delayed failure, and residual static strength, 6872

uniaxial and biaxial toughness of titanium alloy sheet, 11552

Fragulo, Hilario Anido, *see* Anido-Fragulo, Hilario.

Franca, Jorge I. Miquel, *see* Miquel Franca, Jorge I.

France:

alien amateur radio operators, authorization to operate, agreement, 2897

background notes, 13135

communication systems and depots, agreement, 5551

computers, Soviet view, 1270

consular convention—

report, 16352

treaty, text, etc., 9184

defense—

air depot at Deols, La Martinerie agreement, 5550

use of certain air bases and facilities, agreement, 7168

disposal of United States military installations and supplies, reports, 6109, 7769

establishing business in, 4431

headquarters of Deputy Commander, Allied Forces in Europe, agreement, 7170

heavy water production, study, 1196

income-tax convention, 16351

military exclusion of U.S., excess property control and related problems, hearings, 16327

mineral industry, minerals yearbook chapter, 16858

navy, hull testing basin, means of experimentation and research, 11258

north coast, sailing directions, 13022

petroleum products pipeline, establishment, agreement, 7169

prune industry, 12565

reactions to American involvement in Vietnam, 5703

satellite-balloon meteorological research (Project EOIE), agreement, 2906

INDEX 1967

France—Continued
 social composition of French Communist Party and its evolution, 9651
 social security system, reform, 17199
 travel to United States, market survey, 5580
 United States military installations, investment of military assistance funds, 9155
 Franchise tax, District of Columbia, amend act, reports, 879, 893
 Franchises (business):
 exclusive territorial franchise bill, hearings, 7817
 franchise company data, equal opportunity in business, 7450
 franchising agreements, effect on small business, hearings print additional copies, reports, 916, 2030
 Francis, P. S., fabrication, etc., of ultrathin reverse osmosis membranes, 12641
 Francis, Leo C., computer program for determining effects of chemical kinetics on exhaust-nozzle performance, 15575
 Franco, John J.:
 Arkansas River navigation entrance, 17737
 hopper dredge dragheads, 6211
 navigation conditions at—
 Arkansas River Lock and Dam no. 4, 2221
 Belleville Locks and Dam, Ohio River, 1030
 Columbia Lock and Dam, Ouachita River, La., 6212
 McAlpine Locks and Dam, Ohio River, 6210
 Millers Ferry Lock and Dam, Alabama River, Ala., 10961
 Franken, Peter A., propagation of sound from airport ground operations, 11404
 Frankfurt, Germany, U.S. trade center, 12654
 Franking privilege:
 members of Congress, franked mail covers, amend United States Code, hearings, 17607
 telegraph and telephone, FCC rules and regulations, 3279
 Franklin County, Kans., dedication ceremonies for water system (remarks), 4141
 Franklin County, Mass., soil survey report, 8696
 Franquiz, Jose J. Diaz, see Diaz Franquiz, Jose J.
 Franseth, Jane, survey of research on grouping as related to pupil learning, 4721
 Fraser, T. M., storage of biological samples, 9820
 Fraud:
 and mailability, enforcement action, 3360
 mail, how postal inspection service protects you, 17119
 sale of real estate subdivisions through mails and in interstate commerce, prevent hearings, 17642
 Frazier, Arthur H., William G. Price and Price current meters, 9951
 Frazier, Emery L., tributes upon retirement, 2075
 Fredricksburg, Battle of, 1862, where hundred thousand fell, 1533
 Free jet impingement normal to curved surface in vacuum, 9897
 Free-molecule flow and surface diffusion through slots and tubes, summary, 8508
 Free radicals, light-induced, in wood, 4846
 Free transportation, see Franking privilege.
 Free world assistance for South Viet-nam, 8716
 Free world production and trade in selected household appliances, 7573
 Freedman's Hospital School of Nursing, announcement, 2808
 Freedom, see Liberty.
 Freedom of religion, see Religious liberty.

Freedom of the seas, seapower, guardian of freedom, 9976
 Freeman, Delma C., jr., low subsonic flight and force investigation of supersonic transport model with highly swept arrow wing, 12924
 Freeman, Orville L.:
 addresses, etc.—
 Aug. 4, 1966, 52
 Aug. 13, 1966, 28
 Aug. 24, 1966, 25
 Sept. 8, 1966, 22, 24
 Sept. 14, 1966, 23
 Sept. 26, 1966, 51
 Oct. 3, 1966, 1677
 Oct. 4, 1966, 1696
 Oct. 11, 1966, 1719
 Oct. 12, 1966, 1678
 Oct. 13, 1966, 1694
 Nov. 1, 1966, 4119
 Nov. 14, 1966, 4094
 Nov. 15, 1966, 4142
 Nov. 19, 1966, 4091
 Nov. 21, 1966, 4092
 Dec. 6, 1966, 4093
 Dec. 12, 1966, 7295
 Jan. 20, 1967, 7268
 Jan. 30, 1967, 4108, 8821
 Feb. 6, 1967, 8824
 Feb. 7, 1967, 7258
 Feb. 15, 1967, 7296, 8822
 Feb. 27, 1967, 7280
 Mar. 14, 1967, 7257
 Mar. 20, 1967, 10163
 Mar. 23, 1967, 8823
 Apr. 3, 1967, 10159
 Apr. 7, 1967, 10158
 Apr. 19 and 20, 1967, 10198
 Apr. 20, 1967, 10160
 Apr. 25, 1967, 10196
 May 3, 1967, 13242
 May 8, 1967, 13209, 13220
 May 16, 1967, 10197, 13240
 June 13, 1967, 13241
 June 15, 1967, 13219
 July 7, 1967, 13243
 Aug. 1, 1967, 15834
 Aug. 14, 1967, 15846, 15876-877
 Aug. 30, 1967, 15835
 agriculture 2000, policy speeches, compilation, 13218
 Freeman, Robert E., farm-retail price spreads for dairy products, 1939-66, 10181
 Freeman, T. G., Federal-State cooperative snow surveys for Alaska, 3317
 Freeport, Tex., saline water conversion demonstration plant, annual report, 17848
 Freese, Frank, elementary statistical methods for forester, 7260
 Freeswick, D.C., automatic sampler for collecting radioactive particulates in ground level air, 1788
 Freeways, see Roads and highways.
 Freeze drying, see Lyophilization.
 Freezers:
 provisioning industry, 5648
 what to do when your home freezer stops, 10173
 Freezing:
 food, combination main dishes, 17313
 home freezing of—
 fruits and vegetables, 11930
 poultry, 4107
 saline water conversion—
 direct separation process, experimental investigation, 12644
 research, 9593
 tests of concretes of various strengths and air contents, 13986
 thermodynamics and kinetics, 6446
 transient solidification of warm liquid flowing over chilled flat plate, 12935
 see also names of commodities, etc., frozen.
 Freezing points, depression and heat capacity of soils, thermodynamic relationships, 8878

Freezing spring temperatures damage knob-cone pine, 8117

Freight:

carload waybill statistics, 1964—
mileage distribution by type of car, 6472
territorial distribution by type of car, 8231

traffic and revenue, 6473
weight distribution by type of car, 8232
commodity statistics, annual report, 12656
cost of transporting by class 1 and 2 motor common carriers—

by regions or territories, 16726
Central region, 11232
Middlewest region, 11233
New England region, 9604, 11234
Southwest region, 11235

damages in transportation, recovery of reasonable attorney's fees, hearings, 17645

description and suffixes, Army regulation, change, 14790

preparation for air shipment, DSA manual, 17692

rail revenue contribution by commodity and territory, developing, 8234

rail service costs, formula for use in determining, 4926

Freight cars:

farmer cooperatives owning or leasing covered hopper cars, 16545
situation and prospects, 10919

Freight forwarders:

air freight forwarder industry, future (remarks), 16049

air freight forwarders must grow while educating industry in regards to their service (remarks), 12096

air transportation industry, small business role, report, 4511

facilitating air-truck movements for smaller community (remarks), 17447

revenues, expenses, and statistics, quarterly, 3833

transport statistics, 4929

Freight rates:

airfreight rates, introduction, 16047

cost-based desirability, and feasibility, summary, 13163

intercoastal shipping, accounting at expiration of rate suspension, hearings, 16337

ocean, military cargoes, by U.S. flag ships at reduced rates, hearings, 4552

reduced, for governmental bodies, limit hearings, 16398

refunding, FMC to authorize, hearings, 16337

specialist, examination announcement, 206

Freight trains, *see* Railroads.

Freitas, Branca da G. F., relief, 12226

Fremont County, Wyo., Puddle Springs quadrangle, geology, 12602

French, G. W.:

evaluation of cost factors in production and harvesting of potatoes, 15873

machine for application of dust to cut seed potatoes, 7241

French, J. J., progress report on proposed ground-water studies in Lytle Creek-San Servaline area, Upper Santa Ana Valley, Calif., 1125

French bathyscaphe departs for Japan, 9631

French fried potatoes, *see* Potatoes.

French Guiana, mineral industry, minerals yearbook chapter, 11361

French language, basic course, supplementary exercises, 14675

French literature, classification, Library of Congress, 2327

French Polynesia:

Makatea Island, mineral industry, minerals yearbook chapter, 9759

Marquesas Islands and adjacent areas longline fishing for deep-swimming tunas, 12549

French Prairie, geology and water resources of area, 14179

French Somaliland, labor conditions, 5074

Freon-113 condensing in downward flow in vertical tube, local heat-transfer and pressure distributions, 11510

Frequencies:

automatic control systems responding to Doppler shift, synthesis, USSR study, 16742

design concepts using ring lasers for frequency stabilization, 11472

determination of fixed base natural frequencies of shipboard equipment by shake tests, 11673

developing quadrature voltages at variable frequencies by using parallel-T network, 5361

distributions, mixed, estimation, 12947

frequency response of forced-flow single-tube boiler, 12952

high frequency magnetic recording, USSR study, 6504

hydrogen maser as highly stable frequency reference, 11475

infralow devices, new patents, USSR study, 9647

microwave and high-frequency bibliography, 17031

molecular vibrational, tables, 8524, 18077

natural, of closed spherical sandwich shells determined by computer program, 16939

pressure levels and pulsation frequencies can be varied on high pressure/frequency testing device, 17971

resonance frequency, natural shift, 2745

resonant, of dielectric sphere immersed in plasma, 12929

response and transfer functions of nuclear rocket engine system, 11526

temperature dependence of dielectric constant of micamuscovite at varying frequencies, USSR study, 16737

see also Audio frequencies—Radio frequencies—Ultrahigh frequency.

Frequency discriminators, electronic, description, 12888

Frequency modulation, *see* Radio frequency modulation.

Frequency multipliers, experimental coherent fractional, at S-band, 14441

Frequency response:

characteristics of propellant vaporization, analysis, 5235

forced-flow single-tube boiler with inserts, 18022

Frequency shift converter, automatic control systems responding to Doppler shift, synthesis, USSR study, 16742

Frequency spectrum of fluctuations of sea water temperature, 1180

Frequency-to-analog converter, fast-response, 14445

Fresco De Jongh, Guillermo, relief, 10544, 13513, 13761

Fresh fruit, *see* Fruit.

Fresh water fishes, *see* Fish and fisheries.

Fresnel diffraction plates are simple and inexpensive, 16945

Fresnillo mine, geometry of metal distribution, 9771

Frey, H. Thomas, agricultural application of remote sensing, potential from space platforms, 15843

Fribourg University, nuclear physics research activities, 5011

Friction:

brake cushions acceleration and vibration loads, 6771

characteristics of rhenium, single-crystal and polycrystalline, in vacuum, 9912

coefficients for laminar and turbulent flow with rations of surface to bulk temperature, 17014

Friction—Continued

- copper-aluminum alloys, possible relation with decreasing stacking-fault energy, 8490
- copper, single-crystal and polycrystalline, recrystallization and preferred orientation, 8481
- friction and leakage losses in blade-rings of turbines and turbine units, 5277
- frictional loss in metal bellows and flexible hose, method of predicting, 9825D
- impregnated mechanical carbons, wear and friction at temperatures to 1400°F in air or nitrogen, 9915
- low-temperature, reduction by use of additions to fused-fluoride coatings, 5265
- machine tests slow-speed sliding friction in high vacuum, 17989
- metals in single-crystal and polycrystalline form, effect of recrystallization, 15574
- sliding, platinum metals group members, 15578
- status of research on lubricants, friction and wear, 17082
- wear and friction of polymer laminates in liquid nitrogen, etc., 2693
- wear studies of slip rings and gas bearing components, 18003
- Fridle, Willmon :
manufacturing earnings series, 5083
summary, 12775
- Frie, Jimmie W., soil survey of Greer County, Okla., 10088
- Friedel, Robert A. :
advances in coal spectrometry, absorption spectrometry, 16848
infrared and ultraviolet spectrometric techniques and spectra-structure correlations, 6631
- Frieden, Bernard J., metropolitan America, challenge to Federalism, 2048
- Friedland, B., stability of attitude control systems acted upon by random perturbations, 11399
- Friedlander, Alan L., error analysis of celestial-inertial navigation for low-thrust interplanetary vehicles, 8424
- Friedman, Stanford B., childhood leukemia, pamphlet for parents, 18157
- Friendship, Americans extend hand to visitors from throughout world, 10126
- Frigerio, Norman A., your body and radiation, 7445
- Friichtenicht, J. F., laboratory measurement of meteor luminous efficiency, 14111
- Fris, Herman R., Federal exploration of American West, 8516
- Fringe benefits, *see* Employee benefit plans.
- Frisbie, Bryan R., mineral industry of Peru, 11364
- Frisch, Harold P., thermal bending plus twist of thin-walled cylinder of open section with application to gravity gradient booms, 13561
- Frisch, Max, Don Juan play, Moscow production criticized, 6541
- Fritch, D. J., results from full-scale measurements of midship bending stresses on 2 dry-cargo ships, 10076
- Froeschner, Richard C., revision of cactus plant bug genus *Hesperolabops* Kirkaldy, etc., 14539
- Frogs, cornea, monomethylhydrazine toxicity, 10242
- Frohlich, Philip, disability insurance and aid to the blind, 11799
- Frohne, Karl-Helz, reservoir study of William Kaufman lease Clover-Rush Run field, Roane County, W. Va., 14347
- From buttermilk to gum log, 12466
- From rote to reason, 5385
- From Ronymede to Ganymede, 18059
- Frondel, Judith W., glossary of uranium and thorium-bearing minerals, 17819

- Frost, Oakley M., potatoes and sweet potatoes, usual dates for planting, harvesting, marketing, by seasons, etc., 13211
- Frost, W. T., water supply outlook and Federal-State-private cooperative snow surveys for Oregon, 4049
- Frost, pavement evaluation for frost conditions, Army technical manuals, 5741, 5743, 7394
- Frozen foods, purchased, home care, 17315
see also Cold storage—*also* names or classes of foods frozen.
- Frozen ground :
bibliography, with abstracts, 14791
interface between ice and silicate surfaces, 11982
phase composition of frozen montmorillonite-water mixtures from heat capacity measurements, 14792
- Fruit :
canned, foreign agriculture circulars, 3345
canned deciduous, Greek industry, 17792
census of agriculture, 5903-4, 7499-7510, 8982-65, 10288-398, 12091-92, 13404-412, 14837-839, 16036-40, 17442
containers, standard acts of 1916 and 1928, repeal—
hearings, 754, 4636
report, 889
controlled atmosphere storage, development, 7939
culture, etc., publications, price list, 5417
deciduous, foreign agriculture circulars, 3345
disinfestation by gamma irradiation, dosimetry, tolerance, and shelf life extension, annual report, 5794
dried, foreign agriculture circulars, 3345
fresh—
market news, weekly summary, 3361
prices, 1966, Chicago and New York City, 10203
shipments, by commodities, etc., 10874
shipments, by States, etc., 10873
fresh, unloads—
eastern cities, by commodities, States, etc., 7830
for 41 cities, 7834
midwestern cities, by commodities, States, etc., 7832
southern cities, by commodities, States, etc., 7833
western cities, by commodities, States, etc., 7831
fruit situation, 3364
fruits and vegetables, bright jewels, guide for program aides in home economics, 4133
good choices for thrifty family, variety selection and use, 9339
home canning, 15850
home freezing, 11930
home garden, Pacific Coast States and Arizona, 5635
how to use USDA grades in buying, 5671
irradiation preservation, 1784
Mexican, fumigation with ethylene dibromide, manual, 13203
noncitrus, production, use, value, by States, 11944, 14695-696
northern Great Plains, growing for home use, 7272
perishable agricultural commodities act, fair trading in fruit industry, 13236
processed—
plants under USDA continuous inspection, list, 16447
standards for grades, 6135
USDA inspection service, 11937
shelf life, extending by use of radiation technology in postharvest procedures, 5792
storing in basements, cellars, outbuildings, and pits, 5631
vitamin A, good choice for thrifty family selection, 9337

Fruit—
vitamin
selection
see name
Fruit Ju
cal). 5
Fruits, A
Frustum
concen-
tions.
Fry, Be
cepts
12851
Fry, Ed
revisi
revisi
Fry, I
defin
FSLIC,
suran
FTSR l
Fuel :
distill
123
emulsi
blin
Feden
ply
flame
fluor
fuel
def
fuels
gro
tur
high-
ser
hydro
17
Indus
cr
mine
ye
mine
dep
do
min
16
miss
fro
95
publi
resou
an
retal
rock
52
alosh
fee
temp
en
16
used
see cr
fu
Fuel c
Fuel c
Fuel o
and
m
bunk
bunk
ga
ye
burn
dles
ve
liqui
de
Nav
m

Fruit—Continued
 vitamin C, good choice for thrifty family, selection, 9338
see also Horticultural products—also names of fruits.
 Fruit juices, consumer purchases (periodical), 3145
 Fruits, *see* Fruit.
 Frustums, aerodynamic characteristics for cone-cylinder-frustum-cylinder configurations, 9804
 Fry, Bernard L., feasibility of V/STOL concepts for short-haul transport aircraft, 12851
 Fry, Edward R.:
 revision of bank credit series, 16595
 revision of money supply series, 16596
 Frye, L. R., heat exchange, classification definitions, 18127
 FSLIC, *see* Federal Savings and Loan Insurance Corporation.
 FTSR letter, 5895-97
 Fuel:
 distillate fuels, hydrogenation studies, 12817
 emulsified, feasibility of burning in gas turbine engines, 11998
 Federal item identification guides for supply cataloging, supplements, 3290
 flame fuels, Army technical manual, 105
 fluorine and fluorine-oxygen mixtures in rocket systems, handling and use, 11425
 fuel and igniting devices, classification definitions, 13043
 fuels and electric energy used, by major groups, etc., annual survey of manufactures, 17419
 high-energy, for supersonic transport services, 11532
 hydrocarbon, flammability properties, 17094
 industries, employment and injuries minerals yearbook chapter, 2536
 mineral-fuel industries review, minerals yearbook chapter, 5132
 mineral fuels, minerals yearbook—departmental edition, 11366
 document edition, 10495
 minimum fuel ascent from lunar surface, 16994
 missile fuel, Air Force Dept. procurement from sole-source supplier, GAO review, 9551
 publications, price list, 2803
 resources, Green River formations, Utah and Colo., 12610
 retail prices and indexes, 3830
 rocket, solid, outgassing rates in vacuum, 5262
 sloshing experiments, baffle thickness effects, 2709
 temperatures in gaseous nuclear rocket engine, local and average estimates, 16998
 used in mineral industries, census of mineral industries, 7470
 see also Forest fires—Liquid fuels—Motor fuel—Reactor fuels.
 Fuel cells, *see* Electric batteries.
 Fuel elements, *see* Reactor fuel elements.
 Fuel oil:
 and residential and commercial heating markets, outlook (remarks), 17101
 bunker oil, foreign trade reports, 3998
 bunker oil laden in U.S. on vessels engaged in foreign trade, 1966 calendar year, 10399
 burner fuel oils, petroleum products survey, 16860
 diesel fuel oils, petroleum products survey, 2568
 liquid fueling and dispensing facilities, design manual, 13016
 Navy, sea water contamination, microwave monitoring, 15637

Fuel tanks, *see* Tanks.
 Fuel valves, *see* Valves.
 Fuels, *see* Fuel—Reactor fuels.
 Fuller, Dennis E., static stability characteristics swept arrow wing model, etc., 14475
 Fulton, John D.:
 microorganisms in 2 types of air masses at 690 meters over a city, 66
 microorganisms of land air mass as it traverses ocean, 68
 relationship between altitude and micropopulation, 1733
 relationship between frontal activity and micropopulation at altitude, 1732
 Fulton, Kenneth, postal life, magazine for postal employees, 13055
 Fultonberg, D. N., corrosion of aluminum in water, 17938
 Funch, George, jr., remarks, May 3, 1967, 8997
 Fumigation:
 Mexican fruits with ethylene dibromide, 13203
 roller system to facilitate covering boxcars with tarpaulins, 13202
 wheat with methyl bromide, gravity-penetration, single-pass, and closed-recirculation methods, 15861
 Fun Wat Hoy, *see* Hoy, Fun Wat.
 Functional analysis, minimum principle in calculus of variations, Italian study, 4995
 Functions (mathematical), *see* Mathematics.
 Fund raising:
 voluntary health and welfare agencies within Federal service, manual, 3539
 change, 4399
 Funds:
 Federal contributions, opportunities for reducing by maximizing investment of excess funds held by local housing authorities, Housing and Urban Development Dept., GAO report, 6376
 Federal, day care projects, 3702, 10140
 objectives for Federal funds (address), 13957
 requisition fund codes, MILSTRIP, 16473
 see also Money—Revolving funds—Welfare funds—also names of departments, etc., for which funds are used—also subjects for which funds are used.
 Fundulea Agricultural Research Institute, Rumania, activities, 10th anniversary, 9612
 Funeral directors, *see* Undertakers and undertaking.
 Fungi, *see* Streptomyces.
 Funk, David T., annotated bibliography of walnuts and related species, 8108
 Fur seals, *see* Seals (animals).
 Furman, Albert L., soil survey of Seminole County, Fla., 2876
 Furnaces:
 equipment, Federal item identification guides for supply cataloging, supplements, 3288
 Federal item identification guide, 15184
 see also Blast furnaces—Electric furnaces.
 Furness, Betty, remarks, May 26, 1967, 11701
 Furnishings, *see* Household goods.
 Furniture:
 Federal item identification guides for supply cataloging, supplements, 3292
 household, current industrial reports, 7479
 retail furniture report, 3829
 retailing, bibliography, 15732
 see also Office furniture and equipment.
 Furs, Federal item identification guides for supply cataloging, supplements, 3292
 Fuselage:
 aft mounted nacelles effects on subsonic longitudinal aerodynamic characteristics of twin-turbojet airplane, 2730
 variable-sweep wing-fuselage configuration, effect of skewed wing-tip controls, 8487

INDEX 1967

- Fuses (ignition devices):
 - consolidated identification list for test evaluation, Federal supply catalog, Defense Dept. section, 3318, 7855
- Fuses (safety devices):
 - fused diode provides visual indication of fuse condition, 14431
 - solid-state recoverable fuse functions as circuit breaker, 6845
- Fusiform rust, infections, sodium arsenite, possible eradicator, 12581
- Fusion, welding, workmanship standards, 14365
- Fusion (nuclear), *see* Nuclear fusion.
- Fuste, Ricardo R., relief, 275, 584
- Fusulinidae:
 - from Graford formation and Winchell limestone, Brown County, Texas, 12615
 - Permian tethyan fusulinids from California, 16699
- Future in materials, 17472
- Future national space objectives, 2058
- Futures, *see* Commodity exchanges—Speculation.
- Fuzes, *see* Fuses (safety devices).

G

- G.A.O., *see* General Accounting Office.
- Gabon:
 - labor conditions, 2509
 - mineral industry, minerals yearbook chapter, 8348
- Gabriel, W. F., tunnel diode low-level detection, 11493
- Gabron, Frank, thermal nanikin, 1435
- Gadomski, S. T., dry-packed beds for removal of strong-acid gases from recycled atmospheres, 5350
- Gages:
 - continuity, measurement of crack growth on flat and curved surfaces at cryogenic temperatures, 2721
 - controls force for placing chips on substrates, 6832
 - displacement, for crack-extension measurements, design and use, 1513
 - mechanical gage checks tubing flare, roundness and concentricity, 6816
 - multiple element foil, crack growth measured on flat and curved surfaces at cryogenic temperatures, 17992
 - pipe thread, holding fixture facilitates measurements, 8474
 - tests tube flares quickly and accurately, 5210
 - three component borehole deformation, for determining stress in rock, 15481
- see also* Ionization gages—Liquid level gages—Pressure gages—Rivers—Skin-friction gages—Strain gages—Vacuum gages.
- Gaging stations, Pacific Northwest, annual peak water discharge, 16680
- Gainesville, Fla., Insects Affecting Man and Animals Research Laboratory, materials evaluated, 14736
- Galaïd, Ruth C., welfare in review, 4061
- Galaxies, celestial X-ray sources, high angular resolution studies program, 8428
- Gale, Hazen F., farm food marketing bill and its components, 6170
- Galena Mine, Wallace, Idaho, stress ellipsoid determination in rock-burst-prone area, 14351
- Galeofida, *see* Sharks.
- Gall, Lorraine S., effect of diet and atmosphere on intestinal and skin flora, 9799
- Gallagher, James F., variability of water masses in Indian Ocean, 11630
- Gallatin, Albert, 1½-cent regular postage stamp (poster), 5386

- Gallaudet College:
 - model secondary school for deaf to serve National Capital region, establishment and operation—
 - law, 408
 - law, legislative summary, 8192
- Galloway, Lowell E., interindustry labor mobility in United States, 13119
- Gallinules, hunting, possession, transportation, importation, 1967-68, Federal regulations, 16623
- Gallium, extraction from coal fly ash and phosphorus furnace flue dust, 6780
- Gallo, William F., investigation of methods for predicting flow in shock layer over bodies at small angles of attack, 11507
- Galura, Julieta G., *see* Bersamin, Julieta G.
- Galvanic corrosion, *see* Corrosion and anti-corrosives.
- Galvanic couples, *see* Voltaic couples.
- Galvanomagnetism, *see* Electromagnetism.
- Galvin, Cyril J., longshore current data, 10952
- Gambel oak, *see* Oak.
- Gambia:
 - background notes, 11817
 - capsule facts for Armed Forces, 11975
 - labor conditions, 1374
 - Peace Corps program, agreement, 7193
- Gambling, prohibit certain financial institutions from participating, hearings, 12292, 16397
- Game and game birds:
 - big game—
 - handling your kill, 8056
 - inventory, 17788
 - conservation, laws relating to, compilation, 1980
 - migratory bird conservation act, amend—
 - hearing, 16665
 - report, 12265
 - migratory birds, Federal regulations governing hunting, possession, transportation, and importation, 16623
 - Alaska, 14061
 - migratory waterfowl regulations, 1967-68, hearing, 16336
 - U.S. game management agent, pilot. Sport Fisheries and Wildlife Bureau, careers, 6345
- Game theory:
 - differential game of survival, generalized solution, USSR study, 14253
 - problem of game encounter of movements, USSR study, 12676
- Gamma globulin, change in normal human serum parameters during simulated altitude and aerospace flights, 8868
- Gamma rays:
 - angular distribution coefficients, compilation, 12013
 - cesium-137, differential energy and angle spectra in water and air, 13326
 - effect of gamma irradiated plant food on monkeys, USSR study, 6571
 - gamma irradiation of fruit and vegetables, dosimetry, tolerance and shelf life extension related to disinfection, manual, report, 5794
 - gamma radiation, effect on—
 - changes in properties of fresh fish, 9669
 - reaction of anthracite with fluorine and chlorine, 2585
 - lethal dose for rabbit, 17347
 - low energy, inspection of brazed aluminum joints, 16967
 - lunar gamma radiation, intensity and special composition, USSR study, 1281
 - prompt gamma rays from radiative capture of thermal neutrons, 5776
 - repeated treatment, effect on radio-resistance, virulence and culture characteristics of certain pathogenic and related bacteria, 12018

Gamma rays—Continued
shelter through architectural design,
shielding requirements influence on
form, 8981
spectra, analysis by method of least
squares, computer program, 8630
thermal neutron capture gamma ray tech-
niques for nondestructive analysis of
reactor burnable poisons, 1790
variations in respiration process during
gamma radiation of plant tissue, 8511
Gammaridae, see Amphipods.
Ganser, Howard G., nomination, hearing,
9327
Gandy, H. W., laser material research, 5344
Ganglia, see Nerves.
Gansel, Charles R., do wet- and dry-site eco-
types exist in slash pine?, 12577
GAO, see General Accounting Office.
Gaposchkin, Cecilia Payne, see Payne-Gap-
oschkin, Cecilia.
Garbage, see Refuse.
Garcia, Armando J. Alonso, see Alonso-
Garcia, Armando J.
Garcia, Carlos V. De La Concepcion, see
Concepcion Garcia, Carlos V. De La.
Garcia, Pedro Lopez, see Lopez Garcia,
Pedro.
Garcia, R. M., moisture-retention capacity of
litter under Arizona chaparral communi-
ties, 1412
Garcia-Hernandez, Fernando O., relief, 798,
9220, 10531, 12154
Garciga, Carlos E., relief, 13751, 16221,
17522
Garcini, Mario R., relief, 13768, 16220, 17521
Garden Grove, Calif., area wage survey,
12773
Gardening, vegetable, Caribbean area, 15836
see also Gardens.
Gardens:
home and garden bulletins, 31, 1697-98,
4107, 5629-33, 7272, 8831-32, 10171,
11930-931, 13224-226, 14743-744,
15850-855, 17313-319
home, chrysanthemum growing, 13224
home fruit—
northern Great Plains, 7272
Pacific Coast States and Arizona, 5635
suburban and farm vegetable gardens,
planning, planting, etc., 8831
watermelons, 4118
Gardner, Daniel E.:
foreign trade regulations of—
Angola, 7574
Mozambique, 4437
Republic of Zambia, 10459
Sierra Leone, 12135
Somali Republic, 12137
Gardner, Dwayne E., Federal assistance for
educational planning, acquiring and de-
veloping sites and constructing facilities,
10931
Gardner, H. R., effect of sample size and en-
vironmental conditions on evaporation of
water from soil, 10
Gardner, John W.:
creative federalism, 2377
remarks, June 30, 1966, 2377
Gardner, R. B., designing efficient logging
systems for northern hardwoods, using
equipment production capabilities and
costs, 2330
Gardner, T. Estelle, low-temperature thermo-
dynamic properties of hydrates of beryl-
lum sulfate, 9777
Garfield, Frank R., toward understanding of
whole developing economic situation, 4792
Garfield County, Okla., soil survey report,
18214
Garfinkle, M., stereographic representation
of Knoop hardness anisotropy, 18051
Garman, Eddie, relief, 12231, 14890
Garmendia de Alsina, Rita M., relief, 9196
Garner, J. D., emergency evacuation tests of
crashed L-1649, 10321

Garnet, yttrium iron garnet rods, study re-
veals new magnetostatic echo mode,
12889
Garishment, see Attachment.
Garrett, W. D., influence of surface-active
material on properties of air bubbles at
air/sea interface, 17088
Garrick, B. J., analysis of nuclear power
plant operating and safety experience,
12007, 13327
Garrick, J. A. F., sharks of genus *Isurus*, etc.,
6946
Garringer, Darwin J., flight demonstration
of skin-friction gage, 6877
Garrison, G. W., Jr., instabilities in linear
Hall current accelerators, 5175
Gary, Ind., midtown west, aid to families
with dependent children, 13435
Gas:
census of mineral industries, 1963—
crude petroleum and natural gas, in-
dustry statistics, 5847
oil and gas field services, industry statis-
tics, 1854
characteristics and distribution in western
Europe, 16102
cold, with hot plasma, production of in-
verse population by mixing, USSR
study, 17866
density measurements using light scat-
tering, 11490
drilling in sea regions, USSR study, 9640
dynamics of 2-phase liquid-gas weightless
medium with aid of surface effects, con-
trol, 11562
extraction, census of mineral industries,
1963, industry statistics, 7465
flow in chemical nonequilibrium, numerical
integration methods for computing, crit-
ical analysis, 15568
flowing axially through constricted arc,
characteristics, numerical calculations,
12955
gas-reservoir properties determined from
pressure buildup data, 15479
heating value of high purity methane, cal-
culation for reference material, 2743
industry—
injury experience, 16851
rapid development in USSR, 2451
injected, in supersonic stream, concen-
tration measurements, 8489
interstate compact to conserve oil and
gas—
consent of Congress to extend—
hearing, 15042
report, 10737
report of Attorney General, 15431
leak detector is simple and inexpensive,
6827
leases, reinstatement, etc., by Secretary of
Interior, hearings, 13708
liquefied petroleum (LP) gas dealers,
census of business, 1963, retail trade,
4270
liquefied streams, mixer conditions tem-
perature, 5219
low rate flow switch, used for gas or liq-
uid, 8477
natural—
accumulation in sedimentary rocks,
gravimetric effects, 12608
act—
amend, hearings, 6093
regulations under, 2255, 3817, 11028,
35247
blast injection, blast furnace operation,
12828
isotopic abundance of neon, etc., rel. to
helium genesis, 9785
liquids and liquefied refinery gases, min-
eral industry survey, monthly, 3603
mineral industry surveys—
monthly, 3602
quarterly, 3604

INDEX 1967

Gas—Continued

natural—continued

- minerals yearbook chapter, 2567
- pipeline safety regulations, hearings, 16403
- plants, processing, in U.S., 8372
- producers sales to interstate pipeline companies, 1973
- safety of interstate pipelines, hearings, 6093
- United States, 1965, analyses, 2543
- pressure feeds film into camera at high speeds, 5143
- publications, price list, 2803
- radon, useful for medical purposes, safely fixed in quartz, 6695
- retail prices and indexes, 3830
- synthesis, noble metals, molybdenum and tungsten as catalysts, 12827
- temperatures, self-balancing line-reversal pyrometer automatically measures, 15538

see also Pipe lines.

- Gas appliances, market for gas equipment in Western Europe, 16102

- Gas bearings, *see* Bearings (machinery).

- Gas chromatographs, *see* Chromatographs.

- Gas chromatography, *see* Chromatography.

- Gas-cooled reactors, *see* Reactors (atomic).

- Gas dynamics, *see* Aerodynamics.

- Gas equipment and appliances, *see* Gas appliances.

- Gas generators, high-performance Brayton cycle radial-flow, design and fabrication, 8409

- Gas pipe lines, *see* Pipe lines.

- Gas turbines, *see* Turbines.

- Gas wells, *see* Gas.

- Gaseous core nuclear rockets, *see* Rockets.

- Gaseous-film cooling of rocket motor with injection near throat, 6882

Gases:

- centered 1-dimensional unsteady expansion of reacting gas mixture subject to vibrational and chemical nonequilibrium, 6891

- compressible gas, throttling elements in flow, USSR study, 4962

- contaminants during vacuum chamber evacuation detected with quartz crystals, 14416

- cosine law in kinetic theory of gases, 9928

- cryogenic, fast response thermocouple measurement of temperatures, 6820

- diffusion of impurities into silicon from gaseous sources, 1421

- dilute gas-solids mixture, heat transfer characteristics in externally heated tube, numerical method for determining, 14326

- electric dipole moments for molecules in gas phase, selected values, 17035

- equilibrium thermodynamic properties, programs for computing, 9898

- evolution, report, 14518

- exhaust, hot, surface heating rates and pressures, predicting, 6795

- expired, multicomponent, instantaneous monitoring, 2601

- flammable, temporary lights, maritime safety data, 17889

- flow rates, device accurately measures and records, 2677

- flowing through wire matrices at surface temperatures to 5500° K, forced-convection heat-transfer correlations, 9913

- gas containing heat sources, digital computer program for calculating steady temperature and density distributions, 16987

- gas controlled bearing supports, 17975

- gas motivated solids dispersion devices, design, 6687

- gas-solids suspensions, power required to circulate, 15483

- heavy-atom, absorptive properties, 5182

Gases—Continued

- high-pressure, precise analytical samples, system automatically supplies, 11442

- high temperature—

- experimental determination of transport properties, 11412

- utilization for advanced tip turbine fans, 4221

- hot flue, sulfur dioxide removal, process development, 12831

- industrial, current industrial reports, 5864

- inhomogeneous, infrared spectral transmittance, calculation, 5218

- inorganic, current industrial reports, 8939, 10354

- ionized, magnetically induced nonequilibrium electron temperatures, 9995

- irradiated, transferred without contamination or dilution, 8469

- isotropic flow solutions for reacting mixtures in thermochemical equilibrium, 16979

- kinetic theory of bimolecular chemical reaction, diffusive drag, and other processes in mixture, 6909

- liquefied-gas storage containers, covering, USSR study, 15403

- nitrogen tetroxide disposal unit combustion products, 11515

- nongray, nonscattering, approximation for radiant energy transport, 11544

- nuclear blast, underground, escape from ground, 1268

- nuclear explosions underground, vent-gas treatment plant, 1809

- PVT data from Burnett compressibility apparatus, method for treating, 16863

- radiometer-pyrometer, tech brief, 6769

- seeded, thermal absorption, 12866

- shield, inert, monitored by portable spectrometer in welding process, 16960

- spacecraft atmospheres, engineering tradeoffs of one- vs. 2-gas systems, literature review, 12879

- strong acid, removal from recycled atmospheres by dry-packed beds, 5350

- supersonic gas flow around blunt bodies, 12974

- synthesis, using recycle systems, kinetics, 9790

- thermodynamic properties—

- related to expansion of 2-component gas, 11449

- Van der Waals fluid in 2-phase region, 11379

- thermophysical properties of gases below 300° K, 6635

- toroidal ring prevents gas ignition at vent stack outlet, 9853

- trace constituents of closed ecological system, delineation program, 7369

- velocity measured by laser Doppler flowmeter, 6847

- see also Liquefied petroleum gases—Mine gases—Noble gases—also names of gases.

- Gaskets:

- and combination space provides effective static seal, 2630

- rubber and alumina, retain vacuum seal in high temperature EMF cell, 5141

- survey, 5195

- Gasoline:

- Federal tax refund, nonhighway and transit users, 1143

- motor, petroleum products survey, 2569, 12811

- outlets at certain postal installations, potential savings available through establishment, Post Office Department, GAO report, 6378

- publications, price list, 2803

- Gasoline service stations, *see* Service stations.

- Gassville, Ark., shirt plant, rural industrialization case study, 17711

JANUARY-DECEMBER

Gastroenterology abstracts and citations (periodical), 3372
 Gastropods:
 Haliotidae through Adeorbidae, from western Pacific Islands, 4890
 upper Crataceous, from Pierre shale at Red Bird, Wyo., 8161
 Gatchell, Charles J., way to reduce highway guardrail costs, machine-driving of wooden posts, 11138
 Gates, George L.:
 deposition of barium sulfate from sea water in oil-well rotary pumps, 11386
 gas-reservoir properties from pressure-buildup data, 15479
 Gates, O. R., determination of silver and indium in magnesium base alloys, lead in indium, and zirconium in hafnium, 9985
 Gates, electrically operated, for livestock markets, 10153
 Gathman, Stuart G., absolute electric field measurements using field mills, 13035
 GATT, *see* General agreement on tariffs and trade.
 Gause, Gerald W., silvical characteristics of bigcone Douglas-fir, 14143
 Gaussian processes, *see* Statistical processes.
 Gaussian quadrature formulae, *see* Quadrature approximations.
 Gavett, Thomas W. quality and pure price index, 8322
 Gavin, James M., testimony, 6102
 Gay, Thomas N., list of standing committees, and committee assignments of Senators, etc., 9179
 Gazelle, Stanley A., oilseed meals, postwar trends in production and use, 9391
 GE series, 3375
 Gearing (planetary):
 system to control fluid mixture ratio, conceptual stage, 5201
 Gears:
 forged with integral teeth high energy rate system evaluation, 8898
 spur gear design technology, advancement, 5747
 Gebhardt, M. R., determining spread factor of water droplets, 10149
 GED, *see* Bis(2-guanidoethyl) disulfide.
 Gelechiidae, *see* Microlepidoptera.
 Gelechioidea, *see* Microlepidoptera.
 Gelfan, Lewis D., FAA aviation news, 944
 Gels:
 Bena-gel, water system, thixotropic suspensions, use of hysteresis loop method to study, 10005
 hydrogen slush, hydrogen gel utilization as fuels for space vehicles, 18006
 GEM, *see* Ground effect machines.
 Gemini, *see* Spacecraft.
 Gemini project, *see* Project Gemini (man-in-space program).
 Geminus, LAC 27, lunar chart, 15886
 Genealogy, records in National Archives, 17027
 General Accounting Office:
 annual report—
 departmental edition, 2340
 document edition, 2012
 appropriations, 1968, legislative—
 hearings, 10633, 12398
 law, 13537
 reports, 10617, 13813
 Comptroller General decisions—
 B-(series), 3129
 digests, 3207
 July 1, 1965-June 30, 1966 bound volume, 15202
 monthly, 3128
 findings and recommendations for improving Government operations, 15294, 16158
 GAO review (periodical), 3371
 policy and procedures manual for guidance of Federal agencies, 6374, 8128-29, 11142-143

General Accounting Office—Continued
 publications, list, 16667
 submission of agency accounting systems for approval, hearing, 737
 transportation manual for guidance of Federal agencies, 3370
 General Advisory Committee to Atomic Energy Commission in commemoration of 100th GAC meeting 8913
 General agreement on tariffs and trade:
 declaration on provisional accession of—
 Argentina, 11862
 Iceland, 7151
 Tunisia, 2894
 United Arab Republic, 11863
 Yugoslavia, 2895
 Kennedy Round—
 agricultural trade negotiations, report, 16643
 completion, results and future impact upon U.S. businessmen (address), 18219
 duty changes in fishery products resulting from GATT negotiations, 12544
 foreign agricultural trade (remarks), 13243
 foreign policy aspects—
 hearings, 730, 10650
 subcommittee report, 10651
 progress and expectations (address), 2415
 Spanish economic development (remarks), 10468
 Spanish edition, 10464
 trade negotiations (address), 14663
 trade policies, hearing, 7805
 modifications in U.S. tariff rates, depth of cuts, cotton, wool and man-made fiber textiles, 13354
 protocol amending general agreement to introduce pt. 4 on trade and development, 7174
 protocol for accession of Yugoslavia to agreement, 10100
 staging of tariff concessions, agreement with—
 Canada, 17247
 Japan, 15802
 United Kingdom, 15803
 trade agreement with Japan, 5540
 trade agreements program and GATT, 1965 report—
 departmental edition, 5404
 document edition, 4469
 trade conference 1964-67, United States negotiations, 13128-129, 15751
 General Beverages of Minnesota, Inc., motor carrier accident, 4928
 General Counsel, Agriculture Dept., appropriations, 1968, hearings, 10629, 12397
 General Counsel, Housing and Urban Development Dept., nomination of Thomas C. McGrath, jr. hearing, 6092
 General Counsel of Treasury Department:
 digest of opinions, 2150
 report for Coast Guard, 7844
 General Management Training Center, CSC, purpose, etc., 5934, 7548
 General Motors Corporation:
 adjustment assistance case pertaining to certain workers, excerpts from Tariff Commission report to Automotive Agreement Adjustment Assistance Board, 11882
 wage chronology, 2506
 General Services Administration:
 annual report, 4883
 appropriations, 1968—
 hearings, 9145, 15147
 reports, 10600, 15131
 basic laws and authorities GSA handbook, revised pages, 15303
 disaster control and civil defense in Federal buildings, handbook change, 14613
 employees, relief, 16171

INDEX 1967

General Services Administration—Cont.
handtool and paint stocks, transfer from Defense Dept., GAO review, 9546
Interagency motor pool vehicles, savings by adopting manufacturers' recommended preventive maintenance programs, GAO report, 10673
mobilization programs, hearing, 12186
motor vehicle utilization in Cape Kennedy Interagency motor pool, GAO report, 2353
policies and practices for rebuilding used motor vehicle tires, GAO review, 14162
press releases, 3732
Public Printer to print for and deliver to GSA additional copy of certain publications, law, 396
regional contracts for repair and maintenance of selected office machines, savings available through expanded use, GAO report, 8148
responsibility for care and handling of excess real and related personal property, report, 13794
revision of method of supplying commercial rental cars, GAO report, 9558
sale of federally owned electric power and salt water distillation facilities to government of Virgin Islands, Virgin Islands Corporation, Interior Dept., GAO review, 8146
savings available through use of formal advertising in contracting for automotive tires and tubes, GAO report, 9557
General theory of asymmetric waves in circular waveguide with open end, 11566
Generating random information for experimental decision problems, 4225
Generative organs tumors of secondary sex organs, 2841
Generators, *see* names or types of generators.
Genesee River and Valley:
basin, engineer report—
departmental edition, 2218
document edition, 2067
Genetics:
effect of chemical compounds combined with ionizing radiation, mutagenic activity, USSR studies, 2438
forest trees, bibliography, 4827
genetic traits in tetraploid and diploid alfalfa, illustrated summary, 8849
hexaploid sweetpotato, theoretical segregation ratios of qualitatively inherited characters, 5688
Introduction into agriculture, USSR study, 1189
2d Rumanian National Symposium, interview concerning meetings, 12703
theory of genetic information, USSR studies, 17860
Genetics (USSR periodical):
translations, 3374
Geneva, Switzerland, International Labor Organization conference, House delegates to attend, appoint, report, 10604
Geneva conventions, agreements relative to treatment of prisoners of war, Army pamphlet, 15939
Geniostoma, species in New Herblides, Fiji, Samoa, and Tonga, studies, title page and index, 17048
Gennari, J. J., location of deep-ocean acoustic sources, 8588
Genovese, Rosa A., relief, 821, 9213, 12235, 13508
Gentile, Augustine, characteristics of persons with impaired hearing, 8660
Geochemical prospecting, *see* Geochemistry—Prospecting.
Geochemistry:
contributions to geochemical prospecting for minerals (series), 4886
data (series), 12606
error in data, theory, 8176

Geochemistry—Continued
estimating geochemical abundance, methods of computation, 9573
field, statistical studies (series), 9573
geochemistry of water (series), 11186
prospecting, use of simple mercury vapor detector, 9388
statistical studies in field geochemistry (series), 8176
tungsten deposits, 1st all-Union conference, 1157
Geodesy:
automation of geodetic work, Hungary, 15365
Eastern Europe, new development, 15358
geodesy and cartography (Hungarian periodical), translations, 17872
geodetic operations in U.S. and in other areas, through international cooperation, report, 14873
geodetic satellite observation station, agreement with—
Japan, 8732, 11867
Mexico, 11859
Hungary, International geodetic conference, 6545
passive geodetic satellite—
canister assemblies, 5184
ground-based photometric surveillance, 11413
inflation rate study, 8426
pathfinders from the stars, new scientific documentary film, announcement, 16085
satellite, use of resonant librating orbits, 14476
technician, examination announcement, 1910
three-dimensional worldwide geodetic reference system, up-dated concept, 6218
use of artificial earth satellites, USSR study, 1212
USSR, scientific research goals, 14257
see also Surveying.
Geodetic technicians, examination announcement, 13445
Geodetics, *see* Geodesy.
Geographers, activities at Moscow University, 12662
Geographic bulletins, 11826, 17222
Geographic distribution of Federal funds for research and development, 13012
Geographic mobility, population of United States, 1874
Geographic Names Board:
decision lists, 1105, 6387, 9559, 14166
gazetteers, 2355, 8152
Geographic note, GE series, 3375
Geographic reports:
Census Bureau, 4356, 16029
State Department, 11827, 17223
Geographical monographs (Communist China periodical):
translations, 1317
Geographical names:
Antarctica, standard place names, 2355
Chile, standard place names, 8152
decision lists, 1105, 6387, 9559, 14166
gazetteers, 2355, 8152
United States, decisions list, 1105
see also names of localities.
Geography:
census, 1970, computer-based geographic coding (paper), 4304
classification, Library of Congress, 5086
distance responses by Air Force Officers in mental status examination, 4174
geographic bulletins, 11826, 17222
geographic note, GE series, 3375
geographic reports—
Census Bureau, 4356, 16029
State Department, 11827, 17223
geographical monographs (Communist China periodical), translations, 1317
instruction, financial assistance guidelines under NDEA, 13956
location codes, 12596

Geography—Continued

memoirs of geography (Chinese periodical), translations, 1312
 national defense education act—
 institutes for advanced study, summer 1967, handbook for directors, 1003
 loans to private nonprofit elementary and secondary schools for equipment and materials, 1007
 world geography II, high school course, study guide, 15180
see also names of places.

Geography and History, Pan American Institute of, *see* Pan American Institute of Geography and History.

Geohydrology, *see* Hydrogeology.

Geological review (Chinese periodical): translation, 1161

Geological Survey:

appropriations, 1968, hearings, 7734
 bulletins, 1110-13, 2356-61, 4886-88, 6388-95, 8153-58, 9560-62, 11161-169, 12597-604, 14168-169, 15304-306, 16681-687, 17817-821
 circulars, 1114-6396, 9563-71, 15307, 16688-689
 new reports about water in Pacific Northwest, 11170

press releases, 3733

professional papers, 1119-24, 2363-72, 4889-91, 6397-6408, 8159-76, 9572-74, 11171-182, 12606-615, 14170-175, 15308-311, 16691-699, 17823-827
 program briefing hearings, 10655
 publications, 17828
 monthly list, 3625

reports and maps released only in open files, lists, 9563, 15307
 research, summaries, 2372, 4891, 11182, 14175

water supply papers, 1128-33, 2374-76, 4892-95, 6409-12, 8177-85, 11186-192, 12617-618, 14177-184, 15312-315, 16700-705, 17829-834

Geologists, examination announcement, amendment, 5920

Geology:

Adam Weiss Peak quadrangle, Hot Springs and Park Counties, Wyo., 2360
 Arabian Peninsula, 1124, 6405-7, 8173
 area—

and aeroradioactivity survey of—
 Pittsburgh area, 1779
 southeastern New York and southern New England, 1778
 northern Alaska, exploration (series), 8159

Western Mojave Desert, Calif., 17824
 Atlantic Continental Shelf and slope, geologic background, 4889

Bahrain, 6405

bedrock—

Chepachet quadrangle, Providence County, RI, 16685

Island Falls quadrangle, Aroostook and Penobscot Counties, Maine, 6401

Shin Pond and Stacyville quadrangles, Penobscot County, Maine, 17825

Big Sandy Creek Valley, Lincoln, Cheyenne, and Kiowa Counties, Colo., 11191

Bosque del Apache National Wildlife Refuge, 17821

Cascade Springs quadrangle, Fall River County, S. Dak., 14168

Charlot site vicinity, Lisburne Peninsula, northwestern Alaska, 8162

Connors Pass quadrangle, Shell Creek range, east-central Nevada, 16694

contributions to economic geology (series), 4888, 6390-91, 8157-58, 12602, 15306, 16687

title page and contents, 16681

contributions to general geology (series), 1111, 2358, 2360, 4887, 11165, 12599-601, 16684-686

Geology—Continued

Eddy County, N. Mex., between Lake McMillan and Carlsbad Springs, 8178

Eldorado Springs quadrangle, Boulder and Jefferson Counties, Colo., 11165

epigenetic uranium deposits in sandstone in United States, 8167

French Prairie area, northern Willamette Valley, Oreg., 14179

general and engineering geology of United States Air Force Academy site, Colo., 11179

geologic interpretation of—
 aeromagnetic survey of Iron Springs district, Utah, 11173

gravity and aeromagnetic maps of Tintic Valley and adjacent areas, 8164

geologic mapping in sea regions, USSR study, 9640

geologic occurrence of monazite, 17826

geological information form for core, grab and dredge samples, coding and key-punching instructions, 6997

Geological Survey research, summaries, 2372, 4891, 11182, 14175

geology and uranium deposits of Ralston Buttes district, Jefferson County, Colo., 15308

geology and uranium deposits of southern Black Hills (series), 12597, 14168

geomorphology—

meeting, Chinese geographical conference, Communist China, 1965, collected works, 11255

probability concepts, 2366

Green River formation, Utah and Colo., 12610

Greenville quadrangle, Piscataquis and Somerset Counties, Maine, 16684

Guam, Mariana Islands (series), 1119

Hot Springs quadrangle, Fall River and Custer Counties, S. Dak., 12597

Hurley West quadrangle, Grant County, N. Mex., 12601

igneous, Dry Mountain quadrangle, Jefferson County, Mont., 2358

Iniskin-Tuxedni region, Alaska, 8163

Iraq, 6407

Kelso Junction quadrangle, Mich., 6392

Kern River alluvial-fan area, ground water, 1116

Kodiak and nearby islands, Alaska, geologic effects of earthquake, 1121

Laguna district, N. Mex., 8165

Lake Bonneville, Weber Delta district, including Ogden, Utah, 6400

Laramie County, Wyo., 8179

Late Cretaceous and Cenozoic, with emphasis on Enos Creek detachment thrust fault, 2360

Lawson-Dumont-Fall River district, Clear Creek County, Colo., 16683

Mammoth quadrangle, Pinal County, Ariz., 11163

Menominee iron-bearing district, Dickinson County, Mich., and Florence and Marinette Counties, Wis., 6398

Mono Craters quadrangle, Calif., structure and metamorphism, 4887

Mount Fairplay area, Alaska, 12599

Mount Wilson quadrangle, western San Juan Mountains, Colo., 15304

North American, abstracts, 2980

northeastern Nassau County, Long Island, N.Y., 4894

northern Elkhorn Mountains, Jefferson and Broadwater Counties, Mont., 2367

northern part of Salar de Atacama, Antofagasta Province, Chile, 11164

Norwood quadrangle, Norfolk and Suffolk Counties, Mass., 6389

Parkfield-Cholame, Calif., earthquakes, June-Aug. 1966, surface geologic effects, 9574

permafrost tunnel, Fairbanks Alaska, 17378

INDEX 1967

Geology—Continued

- Phillipsburg district, Granite County, Mont., 15305
- planning, financing and execution of geological work, decision of Council of Ministers, Rumanian Socialist Republic, 12735
- Portage County, Ohio, 11172
- Potosi quadrangle, Grant County, Wis., and Dubuque County, Iowa, 6388
- publications, price list, 11712
- Puddle Springs quadrangle, Fremont County, Wyo., 12602
- Republic quadrangle and part of Aeneas quadrangle, Ferry County, Wash., 16682
- Rock Run and Goshen Valley areas, northeast Alabama, 9561
- Rumana, planning, financing, and performance of operations, 11252
- Salt Creek area, Bitter Lake National Wildlife Refuge, 17821
- Savannah River and vicinity, for atomic energy plant, 16705
- sedimentary, Saudi Arabia, 1124
- selected quadrangles in Massachusetts (series), 6389, 9560
- Shawnee County, Kans., 11161
- shorter contributions to general geology (series), 1120, 6403, 8166, 8172, 12611-612, 14170, 15309, 16692, 17825
- Steeple Rock mining district, Grant County, N. Mex., 6390
- Stewart Flat quadrangle, Caribou County, Idaho, 11162
- Taunton quadrangle, Bristol and Plymouth Counties, Mass., 9560
- theoretical papers in hydrologic and geomorphic sciences (series), 2366
- Umlat-Maybe Creek region, Alaska, 8159
- upper Mississippi Valley-zinc-lead district (series), 6388
- upper Sevier River basin, Utah, reconnaissance, 14180
- Ute Mountain Indian Reservation, Colo. and N. Mex., 6409
- see also Hydrogeology—Permian period—Pre-Cambrian period—Stratigraphy.
- Geomagnetism, see Terrestrial magnetism.
- Geometric efficiency of electroformed nickel solar concentrator, 14469
- Geometric theory of optimum disorbit problems, 8427
- Geometrical instruments, classification definitions, 18120
- Geometry
 - configuration geometry, effects on supersonic aerodynamic characteristics of launch vehicle, 5239
 - effect on sonic boom, 18041
 - emergency construction and geometric design for roads, streets, walks, and open storage areas at military installations, 5742
 - metal distribution in 5 veins of Fresnillo mine, Zacatecas, Mexico, 9771
 - radiative, conductive, and convective heat transfer problems, computer program solves, 17959
 - solving crime by geometry, USSR study, 1238
 - space oriented, for secondary levels, supplement, 8513
 - turbine, variable, for small gas turbine engines, study, 11996
- Geomorphology, see Geology—Physical geography.
- Geophysical prospecting, see Prospecting.
- Geophysics:
 - American Meteorological Society abstracts, 3636
 - bedrock in Island Falls quadrangle, Aroostook and Penobscot Counties, Maine, 6401
 - geophysical abstracts, 3376
 - geophysical field investigations (series), 2368, 8164, 11173

Geophysics—Continued

- geophysics and space data bulletin, 3377
- preshot geophysical measurements at Pre-Gondola Project site, 15962
- regional investigations of Moab-Needles area, Utah, 2368
- solar-geophysical data (periodical), 10969
- Soviet bloc research (periodical), 3886
- Soviet, modern techniques used, 12669
- Georgaras, Demetrios K., relief, 7654
- Georgaras, James K., see Georgaras, Demetrios, K.
- George, D'Arcy R., desulfating Great Salt Lake brines and sea water, 6688
- George, Donald A., insecticide residues on forage crops, 8803
- George, Ernest J., shelterbelts for northern Great Plains, 1689
- George, J., Mishell, address, Nov. 15, 1966, 2416
- George, Lawrence C., vapor pressure of metal halides, 16864
- George, M., DYNAGYRO, mechanical stability augmentation system for helicopters, 13307
- George, Samuel F., cross modulation in Scamp signal processor, 9990
- Georgetown commercial architecture, Wisconsin Ave., 11616
- Georgetown University:
 - charter, amend to clarify corporate name—law, 370
 - report, 4501
- Georgia:
 - census of agriculture, 1964, State and county statistics, 16038
 - census of manufacturers, 1963, area statistics, 1836
 - census of mineral industries, 1963, area statistics, 4283
 - climatological data, 3096
 - convey property situated therein, reports, 10528, 17630
 - county business patterns, 4310, 13369
 - electric rate book, 2248
 - employment security agency, State employment security agencies, ensure salary comparability, procedures, need for strengthening, Employment Security Bureau, Labor Dept., GAO report, 8134
 - equal opportunity in federally assisted agricultural programs, 16061
 - landings, fish and shellfish, 3378, 18613
 - mineral industry, minerals yearbook chapter, 2552
 - north, forest industry outlook, 1650
 - precipitation data, hourly, 3401
 - soil survey laboratory data and descriptions, 18216
 - southern, Gulf Series in subsurface, 16692
- Georgian Soviet Socialist Republic, medical science, 1155
- Georgiev, Steven, feasibility study of experiment for determining properties of Mars atmosphere, 14371
- Georgiyev, Vladimir, Vice President, Bulgarian Academy of Sciences, interviewed, 4991, 6480
- Geothermal energy:
 - steam and associated resources, disposition, hearings, 4546, 12411, 15037
 - steam resources, develop, message from the President, 5992
- Gerald, John O., freight car situation and prospects, 10919
- Gerardi, Peter A., space flight emergencies and space flight safety, survey, 9171
- Gerber, Carl R., civil, industrial, and scientific uses for nuclear explosives, bibliography, 5787
- Gerhards C. C.:
 - physical and mechanical properties of—blackbutt eucalyptus grown in Hawaii, 2328
 - Norfolk-Island-pine grown in Hawaii, 8105

- Geriatrics, USSR conferences, 1185
 Gerig, Daniel, pension and medical care legislation in Canada, 5516
 Gering Valley, project, drop structure, hydraulic model investigation, 6213
 Germ-free life:
 amleobic mammals, raising, USSR study, 6483
 gnotobiology, basic aspects, USSR studies, 6484
 gnotobiology in Czechoslovakia, 16761
 Germain, Charles J., cylindrical screen cage for rearing bark beetles, 14114
 Germanium, extraction from coal fly ash and phosphorus furnace flue dust, 9789
 Germany:
 East, *see below*, Soviet zone.
 Federal Republic—
 economy, basic data, 10463
 economic statistics, handbook, 3388
 establishing business in, 10458
 market for residential heating equipment, 5953
 mineral industry, minerals yearbook chapter, 12801
 paintings to be transferred in trust for Weimar Museum—
 agreement, 7190
 hearings, 741
 postwar economic assistance claim, settlement, agreement, 11849
 research vessel, Walter Herwig, 17772
 travel to United States, market survey, 5583
 foreign policy documents, 1625
 German Democratic Republic, *see below*, Soviet Zone.
 Soviet Zone—
 East German couple reports on trip to North Vietnam, 11266
 economy, basic data, 5956
 German Democratic Republic agricultural institutions, research work, 6572
 mineral industry, minerals yearbook chapter, 8347
 North Vietnamese interviewed on Vietnam war by East German couple, 12672
 plotters, use in air defense system, 2437
 Third Reich, 1st phase, foreign policy documents, 1625
 U.S. Army personnel ordered to, helpful hints, DA pamphlet, 13299
 West, *see above*, Federal Republic.
 Germination:
 paper and yellow birch in simulated strip cuttings, 4849
 percentage of filled fourwing saltbush seeds, 11128
 white pine seed collected at weekly intervals from 5 trees, 12580
 Gerontology, USSR conferences, 1185
 Gerrity, Martin V., New Zealand's livestock and meat industry, 11097
 Gerstenberg, H. M., Halpern-type neutron detector, 11592
 Gerstle, Richard W., atmospheric emissions from nitric acid manufacturing processes, 5428
 Gertler, Diane B., directory of Federal statistics for local areas, guide to sources, 1966, 1879
 Gerver, Joan, community care of mentally ill, selected annotated bibliography, 1590
 Geymeyer, Helmut G., influence of reinforcing details on yield line pattern and ultimate load-carrying capacity of reinforced concrete slabs, 17736
 GF series, 180, 1881-82, 5886-87, 7492, 10380, 13399-400, 16030-31
 Ghana:
 agricultural commodities, agreement, 14684
 foreign trade regulations, 4432
 housing, basic information, 6418
 Ghana—Continued
 investment guaranties, agreement, 10104
 labor conditions, 2510
 mineral industry, minerals yearbook chapter, 8349
 Ghazally, Osman I., laboratory stress-deformation characteristics of soils under static loading, 2596
 Ghetos, *see* Race problems.
 Ghista, Dhanjoo N., structural optimization with probability of failure constraint, 5252
 GI loans, *see* Loans.
 Giachino, Fred E., air reservist, 3011
 Gibberellic acid, spray effect on seedlings of eastern redcedar, bur oak, and red oak, 11129
 Gibberellins gibberellin-induced growth of dormant sweetgum, 8093
 Gibbons, J. F., BONUS core development program, 8901
 Gibson, Frederick W., aerodynamic investigation of some high-drag entry shapes at Mach 15.4, 16986
 Gibson, James O., passive geodetic satellite canister assemblies, 5184
 Gieseman, Raymond W., underemployment concept, way to measure need for economic development in Appalachia, 10922
 Gifford, Gerald E., influence of growth media, temperatures and light intensities on aspen root and top growth, 14091
 Gifford Pinchot National Forest, progress report, 8055
 Gift tax, *see* Inheritance and transfer tax.
 Gifts:
 District of Columbia uniform gifts to minors act, permitting deposit in savings and loan associations, etc., report, 13639
 expenses, rules for deducting from income tax, 2410
 foreign, acceptance by government officials and employees, establish basic uniform standards—
 law, 391
 Ramseyer rule print, 734
 Gila River water supply outlook and snow surveys, 4044
 Gila River Indian Reservation, leasing of Indian land for 99-year term, authorize, report, 12243
 Gilbert, Carter R., revision of hammerhead sharks (family Sphyrnidae), 9952
 Gilbert, Charles A.:
 forearm vascular responses to lower body negative pressure and orthostasis, 4174
 sodium and water excretion and renal hemodynamics during lower body negative, 14770
 Gilbert and Elllice Islands, Ocean Island, mineral industry, minerals yearbook chapter, 9759
 Gilbertson, E. C., training homemaker-home health aide in personal care, 15714
 Gilles, Robert E.:
 remarks—
 Jan. 24, 1967, 4426
 Feb. 28, 1967, 5958
 Giles County, Va., Clinton hematitic sandstone deposits, Butt Mountain area, 12819
 Gilkey, Millard M., water requirements and uses in Wyoming mineral industries, 12796
 Gilkey, Robert M., Jr., relief, 9080
 Gill, Frank B., pelagic distribution of seabirds in western Indian Ocean, 14534
 Gill, James R., Red Bird section of upper Cretaceous Pierre shale in Wyoming, 2363
 Gillespie W. J.:
 effect of atrial systole on right ventricular stroke output in man, 11956
 vascular and lymphatic absorption of radioactive albumin from lungs, 13269
 Gillett, Philip W., college algebra, study guide, 9363

INDEX 1967

- Gillies, Roderick M.:
 remarks—
 Jan. 24, 1967, 4447
 Jan. 27, 1967, 4448
- Gilliland, E. R., use of magnetic fields to produce ionic concentration gradients, 9589
- Gilliland, Whitney:
 addresses, etc.—
 Nov. 30-Dec. 2, 1966, 1898
 Apr. 13-14, 1967, 8971
 Oct. 12, 1967, 17447
 Oct. 17, 1967, 17449
- Gillmore, John S.:
 channels of technology acquisition in commercial firms, and NASA dissemination program, 14375
 defense systems resources in civil sector, evolving approach, uncertain market, 17371
- Ginning, see Cotton gins and ginning.
- Ginseng, growing, 14742
- Girl Scouts of United States of America, report, 13551
- Girls:
 abilities, in 4-H clothing projects, 48
 counseling, awareness, analysis, action, 13968
 every girl needs chance to become somebody, Job Corps information, 4686
 expanding opportunities, their special counseling needs, 11909
 opportunities in crafts and trades (address), 8796
 7-to-10-year old, in selected Southern States, basic data on metabolic patterns, 13227
 where will you go when the go-go's gone? employment information, 8797
- Giron, David J., viral antibody production in animals exposed to space cabin environment, 74
- Gitterman, Henry, use of waste heat for production of fresh water, 6459
- Giulianetti, Demo J., longitudinal aerodynamic characteristics in ground effect of large-scale, V-STOL model with 4 tilting ducted fans arranged in dual tandem configuration, 18045
- Gulliano, Vincent E., laboratory evaluation of message retrieval systems, 4166
- Glustl, Ernest H., mobilization of Marine Corps Reserve in Korean conflict, 17906
- Glacier National Park, general information, 9958
- Glacier Park Wilderness, designate, hearings, 15163
- Glacier Peak Wilderness, modify, report, 17631
- Glaciers:
 Alaska earthquake, 1964, effects on glaciers, 11178
 ice sheet dimensions, effect of basal water layer, 4196
 non-temperate, sliding, 7379
 thermal probe, heat transfer and performance analysis, 17377
- Gladiolus, production and sales, etc., 10108
- Glands, see Adrenal glands.
- Glare reduction surfaces for automotive vehicles, Federal standard, 6323
- Glaser, Peter E., thermal insulations systems, 17953
- Glaser, Rudolf F., aivsymmetric vibrations of partially liquid-filled cylindrical containers, 12942
- Glasgow Air Force Base, facilities, use by Northwest Regional Services Corporation, hearings, 15156
- Glass:
 cracks in glass electrical connector heads removed by dry blasting with fine abrasives, 12886

- Glass—Continued
 fibrous glass, 1966, current industrial reports, 10353
 figured, corrugated, plate, sheet, and spandrel, Federal item identification guide, 6149
 flat, current industrial reports, 3170
 formulation, with high coefficient of thermal expansion, 8400
 oxide-glass compositions, hot rolling, 12820
 sheet, blown or drawn, flat, Tariff Commission report, 17234
 soda-lime, spreading of organic liquids on, effect of adsorbed water, 18110
 viscosity of standard lead silica glass, 1520
 see also names of manufactured articles and materials.
- Glass bead shot peening retards stress corrosion failure of titanium tanks, 14413
- Glass fibers:
 fabrication techniques for fiber glass reinforced primary aircraft structures, 4222
 laminated, liquid crystals detect voids, 16941
 nonwoven glass fiber mat reinforces polyurethane adhesive, 11450
- Glass Mountains, Permian rock units, nomenclature, etc., 1113
- Glasses, see Spectacles.
- Glassware, consumer, scientific, technical, and industrial, current industrial reports, 4324, 13390
 see also names of articles manufactured from glass.
- Glatter, H. V., study of man in oxygen-helium atmosphere, renal response, 87
- Glaucoma, hope through research, 18167
- Glen Canyon Dam, general information, 11773
- Glen Canyon National Recreation Area, general information, 2755
- Glendale, Ariz., land conveyance, report, 15129
- Glenn, William G., normal human serum parameters for simulated altitude and aerospace flights, etc., 7341-42, 8868
- Glennon, John P., American foreign policy, current documents, 8705, 17211
- Glick, Norman D., establishing business in Japan, 232
- Glick, Perry A., aerial dispersal of pink bollworm in U.S. and Mexico, 5678
- Glide path systems, altitude rate command system, 9997
- Glider (aircraft):
 paraglider configuration having large tapered leading edges and keel, free-flight drop-test investigation, 1475
- Globulin:
 antihemophilic, in-vivo inactivation by hydrazine, relation to fibrinolytic mechanism, 14771
 protein structure according to data from X-ray structural crystallography, USSR study, 12726
- Globoptotes, see Copepods.
- Glossaries:
 abbreviations used in Latin American press, 12721
 plastic terms, consensus, 4680
 uranium and thorium-bearing minerals, 17619
- Glover, James E., Turtle Creek, Pa., channel improvement, 7932
- Gloves, current industrial reports, 4328, 13392
- Glow discharge density sensor probe life is extended, 14430
- Gluckman, Albert G., proper rotations of 3-dimensional orthogonal frame, 6861
- Gluckman, Lillian A., control now for clean air, 3d National Conference on Air Pollution, 14620

- Glucose:
arterial, in anesthetized dog, hydrazine effect, 7359
blood glucose concentration, affects effects of hydrazine on fat transport, 65
serum levels, periodontal status, 4178
values in Macaca mulatta monkey, 7368
Gline, see Adhesives.
- Glycogen, liver, in anesthetized dog, hydrazine effect, 7359
Glyptoscels, see Beetles.
- GMC, see General Motors Corporation.
- Gneiss, Carney Lake gneiss and associated rocks, geology, 6398
Gnotobiotics, see Germ-free life.
- Goals for urban America, 17022
- Gobel, Julio J. Castellanos Lopez, see Castellanos Lopez, Julio J.
- Gobetz, Frank W., minimum-impulse time-free transfer between elliptic orbits, 1432
- Goddard, James E., emerging program for managing flood losses, 13162
- Goddard, James L., address, Sept. 27, 1966, 14075
- Goddard Space Flight Center:
Goddard '66, year in review, chronology, etc., 12846
publications, 1959-62 collection, 11578-579
- Godin, Alfred J., test of grit types in alleviating lead poisoning in mallards, 17786
- Godley, Frank H., fertility and educational attainment, Puerto Rico, 15715
- Goerlitz, Donald F., determination of phenoxy acid herbicides in water by electron-capture and microcoulometric gas chromatography, 15312
- Gozel, Walter C., problems in depth preception, perceived size and distance of familiar objects, 138
- Gold, Harold, slosh dynamics study in near zero gravity, description of vehicle and spacecraft, 11530
- Gold:
deposits, United States production potential, 9755
determination in geologic materials by solvent extraction and atomic-absorption spectrometry, 16688
distribution—
Cripple Creek district, Colo., 9571
diamond-drill core from Homestake Mine, Lead, S. Dak., 6679
Ely mining district, White Pine County, Nev., 9564
domestic mining industry, increase production, etc.—
hearings, 12302
reports, 649, 16288
gold-bearing sedimentary rocks in north-west Wyoming, preliminary report, 9569
its properties, fabrication and uses, 2742
mine production, monthly, 3379
minerals yearbook chapter, 6834
mining industry, production incentives—
hearing, 7814
report, 7780
mining subsidies, provide grants-in-aid to States—
hearings, 12302
report, 16288
production and consumption, 1964, report, 8381
radiogold, application in ovarian cancer treatment, 5031
substituting gold for silver improves electrical connections, 15528
United States movements, 12093
monthly, 3983
- Gold (money):
Mint Bureau, report, 8381
- Gold Mines Assistance Commission:
establish—
hearings, 12302
reports, 649, 16288
- Golberg, Aaron, genus *Melochia* L., 14532
- Golden Spike Centennial Celebration Commission:
establish—
law, 14914
reports, 924, 9289, 13673
- Goldfield, Edwin D.:
country and city data book 1967, statistical abstract supplement—
departmental edition, 12041
document edition, 12201
- Goldfinger, Nathaniel, labor's view of manpower policy, 14279
- Goldfrank, Esther S., artist of Isleta paintings in pueblo society, 14547
- Goldman, Louis, J., expansion and flow characteristics of initially saturated sodium, potassium, and cesium vapors, 2717
- Gondistely, Charles M., electron flow in low-density argon gas including space-charge and elastic collisions, 14480
- Gomez, Anselmo S. Alvarez, see Alvarez-Gomez, Anselmo S.
- Gomez, Gustavo E., relief, 9216
- Gomez, Manuel:
effect of carbonization conditions, etc., on coke size and strength parameters, 16866
estimation of low-temperature carbonization product yield, Utah coalfields, 14345
- Gonodactylus, see Crustaceans.
- Gonvil, Ladleche, or heirs, relief, 610
- Gonvil, Marie, or heirs, relief, 610
- Gonyulax catenella, feasibility of mass, outdoor cultivation, 15684
- Gonzalez, Eduardo, relief, 10712
- Gonzalez, Hugo, relief, 13767, 16218, 17519
- Gonzalez, Noel O., relief, 10720
- Good day at Rough Rock, 9400
- Good housekeeping for successful safety program, 12766, 16801
- Good training, good jobs, MDTA Detroit Skills Center, 16500
- Goodbye to birds and bees, 10932
- Goode, R. J., metallurgical characteristics of high strength structural materials, 5363
- Gooding, W. T., jr., feasibility study of chemical sealing of soils, 17849
- Goodrich, B.F., Co., wage chronology, 1939-66, Akron plant, 8301
- Goodson, Kenneth W., ground effects on 4-propeller tilt-wing configuration over fixed and moving ground plane, 11504
- Goodwin, Morgan E. Panama Canal review, 3674
- Goodwin, Robert C.:
addresses, etc.—
Jan. 9-10, 1967, 6204
June 28, 1967, 12474
Sept. 25, 1967, 16515
- Goodyear, Hugo V., paper, Feb. 6-10, 1967, 5593
- Goodykoontz, Jack H.:
frequency response of forced-flow single-tube boiler with inserts, 18022
heat transfer coefficients and static pressures for condensation of high-velocity steam, 9911
local heat-transfer and pressure distributions for freon-113 condensing in downward flow in vertical tube, 11510
- Gooseberries, see Chinese gooseberries.
- Gorbics, S. G., emission spectra of various thermoluminescent materials, 1552
- Gordon, Collin G., influence of upstream flow discontinuities on acoustic power radiated by model air jet, 6714
- Gordon, Tavia, three views of hypertension and heart disease, 8658
- Gorgas Memorial Hospital:
annual report, 4480
audit report, 4480
- Goring, Sylvia M.:
FAA statistical handbook of aviation, 4756
miscellaneous statistics, general aviation flight plan, etc., 7952

INDEX 1967

Gor'kiy Medical Institute, USSR failings noted, 4936
 Goshen Valley, geology and bauxite deposits, 9561
 Gosling, Arthur W., patterns of subsurface flow in Bloomington-Colton area, Upper Santa Ana Valley, Calif. 1118
 Gosselin, Dean H., relief, 338
 Gott, Garland B.:
 distribution of gold, tellurium, silver, and mercury in—
 Cripple Creek district, Colo., 9571
 Ely mining district, White Pine County, Nev., 9564
 Goudy, William H., woodcock research and management, 14068
 Goulding, Phil G., nomination, hearing, 9306
 Government:
 activist approach to Government-business relations (address), 10327
 bookstores, locations in Washington, D.C. area, 5412
 business-Government relations (addresses), 1937, 9010, 16092-93
 census, 1967, preliminary reports, 13361
 census publications, price list, 7056
 chart book on governmental finances and employment, 1881
 city finances, 13399
 civil defense, governmental responsibilities, programmed orientation to civil defense, 13432
 condition of American federalism, historian's view, 4638
 counselor development in American Society, Government-university relations in professional preparation and employment, conference recommendations, 2482
 creative federalism—
 addresses, 2377, 16707
 hearings, 4639, 13864
 creative partnership with business for balanced economy (address), 9012
 economy in Government, 1967, background material, 9042
 English and Government. Federal textbook on citizenship, 14190, 17844
 Federal—
 available services for multiple handicapped (remarks), 18142
 data processing management, hearings, 16328
 domestic programs to assist American people in furthering their social and economic progress, description, 12447
 information resources in U.S., directory, 15458
 minority group employment, 1930
 organization and employees, title, 5, U.S. code, amend—
 law, 17537
 reports, 7706, 15089
 programs, effect on rural America, hearings, 17583
 programs for development of human resources—
 questions and outline for economic analysis, papers, 12189
 replies from Government departments and agencies to questionnaire, compilation, 7590
 print additional copies, report, 12240
 research and development programs—
 decisionmaking process, report, 15001
 financed by, investigation and study, authorization, report, 6075
 role in air pollution control (address), 13072
 self-supporting reinsurance program to protect employees under private pension plans, establish, hearing, 950
 services available to help paper industry promote its products abroad (remarks), 6465
 Federal-State highway management practices and procedures, hearings, 2055

Government—Continued
 Federal system, improve effectiveness, role of Advisory Commission on Intergovernmental Relations, 13191
 finances, 5887, 13400
 correction notices, 5886, 16030
 governing bodies of Indian groups under Federal supervision, list, 15321
 government and 1967 economy (remarks), 7555
 government finances, GF series, 180, 1881-82, 5886-87, 7492, 10380, 13399-400, 16030-31
 government, universities, and international affairs, crisis in identity, report, 10516
 how government measures unemployment, 15437
 impact of research and development policies upon scientific and technical manpower, report and recommendations, 4650
 interagency motor pool system, potential savings obtainable through increased use, Defense Dept., GAO report, 8137
 interchange of young executives between Government and business (address), 17469
 interlocal governmental cooperation, study of 5 States, 13942
 junior Federal assistant, examination announcement, 13446
 living with Government creatively (address), 10454
 local—
 elective offices, 13361
 finances in selected metropolitan areas, 1882, 16031
 interlocal agreements and contracts handbook, information report, 8801
 manpower and training needs in water pollution control, report, print as Senate document, report, 16362
 rat extermination and control, Federal assistance, reports, 12284, 13676
 local law enforcement, Federal assistance, amend act—
 law, 502
 reports, 635, 929
 local school systems, standard terminology for instruction, 10942
 new patterns of industry-Government partnership in coming decade (address), 4429
 operations, improving, General Accounting Office findings and recommendations, 15294, 16158
 our American Government, what is it? how does it function? 5977
 our Constitution and Government, Federal textbook on citizenship, 12631-632, 14191, 15320
 patent policy—
 annual report, 2240
 hearings, 2127
 processes, public participation, essence of democracy, message from the President, 10523
 publications on, list, 2802
 quality of Government, its machinery, manpower, methods, recommendations to improve, message from the President, 9067
 science, government, and international policy, panel—
 papers, 12315
 proceedings, 9170
 science, government, and public policy, Government-science relationships during 89th Congress, 13716
 scientific and technical communications, progress, 6244
 State and local—
 construction expenditures, 5891-93, 10384, 16033

Government—Continued

State and local—Continued

Federal grants, provide periodic congressional review, etc., hearings, 735
tax revenue, quarterly summaries, 5894,
7495, 10385, 16034

State finances, 1966 summary, 10380
use of satellite communications, 1967—
hearings, 13707
report, 15000

see also Intergovernmental relations—
also headings beginning Government.

Government buildings, see Public buildings.

Government contracts:

administration, Government property in
possession of contractors, guidance,
16456

Air Force research and development—
contracting officers' handbook, 13260
laboratory policies and practices for
procurement management, pamphlet,
13261

Air Force systems acquisition, guide for ef-
fective change processing, 10222
allowance of over-all loss as cost, revoca-
tion, 13109

Army Materiel Command, contractors
guide, 8880

barter, for diamonds for stockpile, bal-
ance-of-payments aspects, GAO report,
15293

bidding, etc., costs charged, Defense Dept.
and NASA, GAO review, 8143

Business Opportunity-Federal Procure-
ment Conference, guidelines for pro-
gram, 8923

code of Federal regulations, 6290, 9478-79
construction and architect-engineering
contracting services for AEC work,
guide, 13350

construction, Defense Dept. awards, need
for compliance with truth-in-negotia-
tions act of 1962, GAO report, 12588

contract administration services, Defense
Supply Agency manual, 6147, 13915

contract file maintenance, closure, and
disposition, regulation supplement, 7846

contractor procurement system review,
guide, 6139

contractor's inspection system, evaluation,
6154

contracts and subcontracts, how obtained
by small business, 7110

cost information, procedures for reporting,
to NASA, 9929

cost or pricing data requirements in award
of prime contracts and subcontracts, De-
fense Dept., GAO report, 4867

Davis-Bacon act, applying provisions to
Government-leased buildings, hearings,
17674

Defense Contract Administration Services,
traffic management handbook, 10889

Defense Contract Audit Agency reviews of
contractors' price proposals, GAO re-
port, 6385

defense materials system program identifica-
tion, use in segregating renegotiable
and nonrenegotiable subcontracts, 13105

delays in payment, how to avoid, guide
for contractors, 17608

dredging, Engineers Corps policies, etc.,
relating to cost estimates, bids, and con-
tract awards, GAO review, 14154

exemption, contracts with Military Airlift
Command, procedure under renegotia-
tion act, 11777

guide for businessmen doing business with
Federal Government, 1104

HEW research contracts, establishing in-
direct cost rates—

guide for educational institutions, 8189

guide for hospitals, 12620

housing authorized by public contracts,
construction reports, 14818

Government contracts—Continued

identical bidding in public procurement,
report of Attorney General, 17883

interlocal agreements and contracts hand-
book, information report, 8801

International Development Agency, pro-
curement regulations, 17855-856

Labor Dept. contract research, guidelines,
6591

McNamara-O'Hara service contract act—
application to contract mail haulers,
7227

guide, 13177

NASA cost plus award for contracting
guide, 16888

NASA incentive contracting guide, 16927

NASA procurement directive, 3591

NASA procurement regulation, 3592
supplement, 18058

National Science Foundation, 8566

Navy prime contractors, selling to, 17100

negotiated, examination-of-records clause
requirement, exempt foreign contractors,
report, 4586

nuclear materials management, AEC-con-
tractor meeting, 13316

painting contracts on Federal facilities in
Washington area, irregularities in per-
formance, hearing, 15033

preparing contractor reports for NASA,
data presentation, 1443

procurement—
code of Federal regulations, 6288-89,
7983, 9480

economic impact, report, 9044

invitations, subcontracting leads, etc.,
Commerce business daily, 3107

small business subcontracting and set-
aside programs, report, 4510

production manual for Contract Admin-
istration Services, 16461

quantity estimates prepared for sollicita-
tion of construction bids, GAO review,
14152

reduction actions by defense contractors,
4670

regional contracts for repair and main-
tenance of selected office machines, sav-
ings available through expanded use,
General Services Administration, GAO
report, 8148

renegotiable, voluntary refunds and in-
terim prepayments, 13110

renegotiation—
bulletins, 11777, 13105-110, 15722-723

cost allowances and disallowances, 15722

letter not to proceed, 13106

renegotiation rulings and bulletins—
index, 15721

table of citations, 15724

textile industry, treatment of shorts and
seconds in segregation of subcontract-
ors' sales, 15723

shipbuilding, price increases, Navy De-
partment, GAO review, 2351

shipping operations, renegotiation, 13107

technical services, policy and practices,
hearings, 10843

vessel repair, renegotiability, revocation,
13108

Walsh-Healey public contracts act, guide,
14716

Government documents, see Government
publications.

Government employees, see Government of-
ficials and employees.

Government employment, see Employment.

Government indemnity, see Indemnity.

Government life insurance, see Life
insurance.

Government offices:
accounting principles and standards for
Federal agencies, 12585

accounting systems, submission for GAO
approval, hearing, 737

INDEX 1967

Government offices—Continued
 administrative practices and procedures—
 authorization, report, 4616
 delay in administrative proceedings—
 evaluation charts, 4647
 questionnaire survey, 2130
 investigation—
 expenses, report, 15090
 report on findings, 9280
 administrative procedure act, amend,
 hearings, 13871
 agencies with disaster assistance respon-
 sibilities, guide, 7919
 architect-engineer fees—
 Government-wide administration of cer-
 tain statutory and regulatory require-
 ments, GAO review, 9548
 statutory and regulatory Government-
 wide administration requirements,
 GAO review, 16668
 concerned with agricultural information
 services offered, 5282
 elective, of State and local governments,
 13361
 executive, reorganization, study, authori-
 zation, report, 6076
 expenditures for social research, 9161
 feasibility of using U.S.-owned excess for-
 eign currencies instead of dollars for
 ocean shipment of military assistance
 program materiel, GAO report, 4866
 Federal consumer services, guide, 13064
 financial statements, submission, Treas.
 Dept. regs., 17267
 general Government matters, appropria-
 tions, 1968, continue—
 hearings, 17635
 laws, 13525, 16131, 17547
 reports, 12276, 13808, 14988, 16267,
 16282, 16285
 Government organization manual, 12529
 governmental resources, foreign affairs re-
 search, directory, 17221
 higher education institutions, contracts,
 grants, and loans, 7755
 improving service to the public, agency
 action programs, 14865
 independent offices appropriations, 1968—
 hearings, 9145, 15147
 reports, 10600, 15131
 information availability, etc., Attorney
 General's memorandum on public infor-
 mation section of administrative proce-
 dure act, 12762
 inter-agency coordination of planning to
 take advantage of technological im-
 provements relating to—
 agency-Treasury operations, 10119
 disbursing and banking operations of
 the Government, 10118
 interagency training programs, 10426
 international cooperation programs ad-
 vancing status of women, reports of
 U.S. Government agencies, 8793
 international scientific programs, partici-
 pation of Federal agencies, report, 6044
 invasions of privacy, hearings, print addi-
 tional copies, report, 10592
 joint financial management improvement
 program, annual report, 11144
 manpower, improved management, 12209
 print as House document, report, 12280
 meetings with agency officials, hearings,
 9150
 motor vehicle fleet management, guide,
 15809
 organization and employees, title 5, U.S.
 Code, amend—
 law, 17537
 reports, 7706, 15089
 organization of Federal executive depart-
 ments and agencies—
 chart, 10847
 committee print, 10848

Government offices—Continued
 policies and procedures, General Account-
 ing Office guidance manuals, 6374,
 8128-29, 11142-143
 records and papers, disposition, reports,
 705, 7695, 9102, 10553, 10577, 12260,
 13628, 13649, 13677, 14958, 16241
 regulatory agencies under jurisdiction of
 House Interstate and Foreign Commerce
 Committee, activities, hearings, 13709
 regulatory and enforcement agencies, ac-
 tivities relating to small business, re-
 port, 4513
 reorganization, see in main alphabet, Gov-
 ernment reorganization plans.
 research and development funds, equitable
 distribution among States, hearings,
 10839
 summer jobs in Federal agencies, 1928
 traffic safety role, hearings, appendix,
 9315
 transportation, GAO guidance manual,
 3370
 youth opportunity campaign, summer
 1966, training conducted by Federal
 agencies for non-college groups em-
 ployed, report, 7550
 see also Government supplies.
 Government officials and employees:
 absence from duty because of dangerous
 weather conditions, to be excused with-
 out loss of pay, amend U.S. Code, hear-
 ing, 9329
 acceptance of gifts and decorations from
 foreign governments, establish basic
 uniform standards—
 law, 391
 Ramseyer rule print, 734
 administrative leave for hurricanes, etc.,
 hearing, 748
 administrative leave to employees repre-
 senting Government employee organiza-
 tions, decision of Comptroller General
 regarding, 17610
 benefits for service in high-risk situations,
 report, 10768
 Bulgaria officials, 1966, directory, 4934
 career appointment after temporary serv-
 ice, acquire through noncompetitive
 examination, amend U.S. Code—
 hearings, 9329, 10674
 law, 17550
 reports, 10746, 13637, 16277
 compensation, correction of inequities—
 law, 450
 report, 915
 continuing eligibility for disability retire-
 ment annuities under civil service re-
 tirement system, GAO report, 1102
 current workforce data, 1919, 10421
 detaching field employees into District of
 Columbia, repeal law prohibiting, law
 12163
 dual benefits payment for same disability
 or death, procedures for preventing,
 GAO review, 12592
 employment and payrolls, monthly, 3894
 examination announcement, Junior Federal
 assistant, 13446
 executive inventory, questions and an-
 swers for executives, 10419
 Federal Aviation Agency, testimony in
 legal proceedings, FAA regulations,
 11904
 Federal employee facts, 1925, 4398
 Federal employee's guide, housing in
 Washington, D.C., area, 4906
 Federal employment—
 monthly report, 3578
 statistics bulletin, 3281
 Federal news clip sheet, 3296
 Federal personnel, bimonthly statistics,
 2985
 Federal system as seen by Federal aid
 officials, results of questionnaire, print
 additional copies, reports, 4597, 10585

Government officials and employees—Cont.

Federal workforce outlook, 12108
fees, salaries, or compensation, jurisdiction of district court over actions to recover, limitation, increase, amend Tucker act, report, 15077
financial protection, 1925
Foreign Service career, general information, 10098
government organization and employees, title 5, U.S. Code, amend—
law, 17537
reports, 7706, 15089
group life insurance—
FPM manual supplement, 3302
health benefits, retired Federal employees health benefits, annual report, 7540
increase coverage—
hearings, 6124, 10673
reports 13662, 13806
veto, 4467, 16155
hazardous duty posts salary differential, etc., message from the President, 5993
health benefits act, text, 4654
health benefits, FPM manual supplement, 3303
high-risk situations, improve benefits, report, 9295
injured employees, compensation payments, prompt adjustment from total to partial disability rates, Employees Compensation Bureau, GAO report, 4870
interagency training programs—
Financial Management and PPBS Training Center, background curriculum, etc., 7547
general information, 10426
General Management Training Center, purposes, etc., 7548
jobs in trades and crafts, equipment operation and repair at journeyman and junior levels, examination announcement, 12102
knowledgeable plastics personnel, directory, 2157
maintenance and service workers in Washington, D.C., metropolitan area, examination announcements, 4403, 10428
amendments, 5925, 7532
marginal employee, management analysis of personnel practices, 2242
maritime employees, annual and sick leave act of 1951, amend, hearing, 4553
medical facilities available to injured in performance of duty under Federal employees' compensation act, 16514
meeting with department and agency officials, hearings, 9150
minority group employees, 1930
number, reduction of employees, Senate amendments, summary, 4568
numerical ceiling, remove—
law, 17550
reports, 10746, 13637, 16277
overseas, Federal voting assistance act of 1955, amend, report, 13817
pay increases, message from the President, 9069
payroll deductions, report, 16385
personnel and pay systems, introduction, 7546
position-classification standards, 3692
postal employees—
field service, ratio of career substitutes, reduce hearings, 17607
instruction and information, 3693
privacy, invasions of, hearings, print additional copies, report, 10592
protect in enjoyment of constitutional rights and prevent invasion of privacy—
hearings, 7822
report, 15121
reemployment rights for those who perform duty in Armed Forces, 5936

Government officials and employees—Cont.

retirement system, benefits and beneficiaries, 11798
rights and responsibilities (address), 5039
salaries, statutory systems, annual report, appendix, 10692
salary act of 1967, hearings, 12310, 17671
salary and retirement annuity increases, 4556
salary classification laws, compilation, 1980
seafaring, additional leave, law, 459
social security coverage, transfer of credits, to close gap in protection, amend U.S. Code, hearings, 10672
staff retirement by systems, appendix to report, 10692
State and local, finances of retirement systems, 7492
summer jobs in Federal agencies, 1928
training act—
implementation, effectiveness, report, 10619
include officers and employees of Senate and House, hearing, 16431
travel expenses, increase, hearing, 16331
unemployment compensation, by industry and State, 3233
use of civil service rather than contractor-furnished employees for NASA support services—
GAO report, 11158
hearing, 16330
voluntary payroll allotment for credit union shares, hearing, 13845
wage board employees, adjusting pay rates, hearings, 12425, 16432
when injured at work—
information, 7921, 15219
work injury benefits, 13967
work stoppages, 14308
see also Civil service—Civil service pensions—Postal service—also names of departments, etc., where employed.
Government Operations Committee, House:
activities, 6037
calendar, 3476
committee prints, 2048, 4537-42, 6037, 9161, 15029
hearings, 735-738, 2047, 2049, 9159-60, 10654, 12301, 13706-707, 15028, 15030-35, 16327-331, 17602-603
investigations and studies—
authorization, report, 6020
expenses, report, 7675
recommendations made during 88th Congress, results, 4541
reports, 2021, 2034, 9111, 10606, 10615, 13690, 14947, 14986, 14996-998, 15000-1, 17575
statutes, compilation, 4538
Government Operations Committee, Senate:
activities, 89th Congress, report, 6068
calendar, 3496
committee prints, 2122, 4638, 4641, 6108-9, 9317, 10838, 10848, 13866-867, 16414-415, 17654-655
hearings, 955-956, 2117-21, 4639-40, 4642, 6110-12, 9315-16, 10839-846, 10849-850, 12400, 13864-865, 15156-159, 16412-413, 16416
investigations and studies—
crime and lawlessness within U.S.—
authorization, report, 15083
interim report on riots, etc., 16375
executive reorganization, authorization, report, 6076
foreign aid expenditures, authorization, report, 4626
Intergovernmental relations, authorization, report, 6074
national security and international operations, authorization, report, 4609
Permanent Subcommittee operations, authorization, report 6073

INDEX 1967

- Government Operations Committee, Senate—continued
 - investigations and studies—Continued research and development programs, authorization, report, 6075
 - organization chart of Federal executive departments and agencies, 10847
 - reports, 900, 906, 2089, 2091, 6068, 10731, 10754-755, 10759, 12392, 13793-794, 10375
- Government organization manual, 12529
- Government periodicals, *see* Periodicals.
- Government Printing Office:
 - appropriations, 1968, legislative—hearings, 10633, 12398
 - law, 13537
 - reports, 10617, 13672, 13813
 - how to do business with GPO, guide for contractors, 8186
 - print and deliver to GSA additional copy of certain publications, law, 396
 - style manual, 9577
 - abridged edition, 11193
- Government Procurement Commission establish, hearings, 10654
- Government property, *see* Public property.
- Government publications:
 - additional copy of certain publications for GSA, Public Printer to print, law, 396
 - brush up on your writing, list, 17130
 - classified list, 17131
 - depository libraries, law governing, and list of libraries, 7765
 - exchange, agreement with—
 - Jamaica, 13145
 - Korea, Republic of, 5543
 - International exchange of publications and documents, conventions concerning, report, 9188
 - monthly catalog, 3568
 - nursing in coronary care units, list, 11754
 - price lists—
 - Public Documents Division—
 - PL series, 1564, 2800-4, 5413-19, 7052-58, 8623, 10037-41, 11712-713, 15669-672, 17132-136, 18149-151
 - subscription services, 5414, 10039, 15670, 18150
 - selective bibliography of Government research reports and translations, list, 1935
 - scientific documentation sponsored by NSF, price, list, 6916
 - selected, list (periodical), 3869
 - State publications, monthly checklist, 3569
 - see also* Congressional documents—also names of departments, etc., issuing publications—also subjects.
- Government reorganization plans:
 - District of Columbia—
 - hearings, 12301, 15022, 15159
 - message from the President, 12205
 - reports, 13690, 14949
 - enacted 89th Cong. 2d sess., 14036
 - executive, study, authorize, report, 6076
 - Health, Education, and Welfare Department, hearings, 956, 2121, 4642, 6112
 - index, 16416
 - National Zoological Park—
 - hearing, 736
 - report, 2021
 - ship documents surrender, transfer authority to approve—
 - hearings, 9159, 10849
 - message from the President, 7598
 - State Department, hearings, 956, 2121, 4642, 6112
 - index, 16416
 - Tariff Commission—
 - hearings, 9160, 10850
 - message from the President, 9061
 - reports, 9111, 10759
- Government securities, yields and prices, 3985
- Government specifications, *see* Government supplies.
- Government supplies:
 - Federal item identification guides for supply cataloging, supplements, 3283-93
 - Federal item identification guides improvement program procedures manual, 2147
 - Federal manual for supply cataloging—format, content, and preparation of Federal supply catalog publications, 12439
 - FSC classes assigned for integrated management, special procedures, 6140
 - International cataloging, 4669
 - item identification, 16458
 - operating procedures, 17689
 - Federal procurement regulations, FPR amendments, 3310
 - Federal specifications, 1071, 2266, 4793, 6506, 8007, 9497, 11061, 12537, 14049, 15251, 16600, 17763
 - Federal specifications and standards—
 - guide, 4885
 - index, 6335
 - supplements, 3409
 - Federal standards, 1072, 2267-70, 4794-96, 6307-15, 8008, 9498, 11062-65, 16601-604, 17764
 - Federal supply catalog, 2151, 3318-19, 3321, 7855-56
 - Federal supply classification, directory and planning, schedules of class and area assignments, 16474
 - Federal supply classification handbook—
 - alphabetic index, supplements, 3323
 - groups and classes, 975
 - numeric index, 3322
 - Federal supply code for manufacturers—
 - excluding United States and Canada, 2145
 - supplements, 3325
 - United States and Canada—
 - code to name, 2144, 16457
 - supplements, 3326
 - name to code, 976, 17688
 - supplements, 3327
 - Federal test method standards, 9499, 15252, 16605
 - general stores stock catalog, hand tools, supplement, 4797
 - GSA stock catalogs—
 - general supplies, 3385, 16606
 - hand tools, 6334
 - supplements 11067, 16608
 - standard forms, 16607
 - supplements, 8009, 11066
 - International Development Agency, procurement regulations, 2994, 17855-856
 - NASA procurement directive, 3591
 - NASA procurement regulations, 3592
 - supplement, 18058
 - Navy procurement directives, 3615
 - procurement—
 - economic impact, report, 9044
 - invitations, subcontracting leads, etc., Commerce business daily, 3107
 - small business subcontracting and set-aside programs, report, 4510
 - see also* Military supplies—Surplus property.
- Governors Commission on Status of Women, statewide meeting held at Des Moines, Iowa, 10143
- Gowans, K. D., soil survey report of Tehama County, Calif., 14638
- Gowen, Justin B.:
 - mineral industry of—
 - Austria, 8343
 - Portugal, 11365
 - Spain, 12807
 - United Kingdom, 12808
- Gowen, Richard J., national workshop on bioengineering research and manpower, proceedings, 15703

GPO, *see* Government Printing Office.
 Grabill, L. R., sugar, starch, and carbohydrates, classification definitions, 18123
 Grace, Thomas M., boiler instabilities due to feed-system-subcooled region coupling, 9917
 Gracey, William:
 cross-pointer-type instrument display in landing with helicopter, 1488
 evaluation of moving-map instrument display in landing approaches with helicopter, 11531
 Graders:
 agricultural commodity (fruit, etc.), examination announcement, amdt., 202
 agricultural commodity grader, career, 9356
 agricultural commodity (grain), examination announcement, amdt., 8983
 agricultural commodity (meat), examination announcement, 16063
 Gradients (mathematics):
 magnetic fields, use to produce ionic concentration gradients, 9589
 Grading of commercial products, dairy plants surveyed and approved, USDA grading service, 6131, 13887
 see also names of products.
 Graduate students, *see* Students.
 Graduate work, *see* Colleges and universities.
 Graduates:
 college—
 civilian career opportunities with Army Dept., 8877
 women, 7 years after graduation, resurvey, 7235
 Job Corps, American business is hiring, 2162
 liberal arts, answer to what can I do in Peace Corps, 5374
 predominantly Negro colleges—
 class of 1964, special report, 14625
 directory, 2483
 training grants awarded by National Institute of Mental Health, 7066
 Grady, Noel, starting and managing small drycleaning business, 5497
 Graford formation, *see* Pennsylvanian period.
 Grafting (physiology):
 popular description of chromosome and animal transplant experiment, USSR study, 1307
 Graham, H. M., evaluating cotton gins for pink bollworm kill, 10147
 Graham, Robert W., convection, etc., in nucleate boiling, 9907
 Grain:
 bulk cargoes, rules and regulations, 4420
 Common Market statistics 1955-56 through 1965-66, compilation, 16642
 costs of storing on farm compared with rates paid for such storage, Commodity Credit Corporation, GAO report, 2342
 crop quality, 1966 carlots and trucklots receipts, 9352
 culture, etc., publications, price list, 5417
 feed grains—
 feed statistics, 17333
 growth in demand in EEC, projection to 1970 and 1975 in relation to consumption, 13949
 program 1966, statistical summary, 8818
 program, 1967, general information, 5673, 5675
 foreign agriculture circulars, 3345
 grain-livestock economy of European Economic Community, 1951-63, historical review, 2176
 market news—
 quarterly summary and statistics, 3383
 weekly, 3382

Grain—Continued
 standards act—
 amend hearings, 17584
 amended, and regulations thereunder, 12431
 standards, official, United States, revised page, 964
 stocks—
 farm and off-farm, by States, 1959-65, revised estimates, 7300
 in all positions, quarterly report, 3905
 in deliverable position at Chicago, weekly report, 3906
 storage facilities, sale, law, 12159
 storages, upright 2-fan crossflow ventilation system, 7248
 wheat and feed grain programs, etc. (address), 4090
 world production, consumption, and trade, prospects, 15209
 Grain elevators:
 cooperative, inventory control and valuation practices, 15235
 country, locating, designing, and building, 1683
 Grain size, grading of abrasive grain for grinding wheels, 11581
 Grain sorghum, *see* Sorghum.
 Gramineae, *see* Muhlenbergia.
 Grammar, *see* Names of foreign languages.
 Grammitis, genus in Ecuador, 17049
 Grand Calumet River, pollution of interstate waters, progress evaluation meeting, 14053
 Grand Canyon National Park, general information, 8556
 Grand fir, *see* Fir.
 Grand Junction, Colo., mechanical samplers in use, design and descriptions, 15963
 Grand Prairie region, Ark., artificial recharge of ground water (series), 1128
 Grand River and Valley:
 comprehensive water resources study of basin—
 economic base study, 1024
 information booklets, 7927-28
 Grande, E., refraction of sound by jet flow and jet temperature, 14389
 Granges, important role in fields of agriculture, law, etc. (address), 4091
 Granite City Defense Depot, employees relief, 779
 Grano, Charles X.:
 8-day volumetric pollen sampler, 2322
 growing loblolly and shortleaf pine in Midsouth, 8827
 Grant, Nicholas J., oxide dispersion strengthened alloys, 17951
 Grant, Roy L.:
 combination statistical design for sensitivity testing, 9754
 effect of weather on sound transmission from explosive shots, 9773
 new gap sensitivity methods for explosives, 9791
 Grant County, N. Mex.:
 Hurley west quadrangle, geology, 12601
 Santa Rita quadrangle, general geology, 14171
 Steeple Rock mining district, geology and ore deposits, 6390
 Grant County, Wis., geology, Potosi quadrangle, 6388
 Grants-in-aid:
 Aging Administration—
 research, demonstration, and development grants, 13192
 training grants, 13193
 air pollution control programs, law, 393
 airport projects involving donated land, Federal participation in cost, GAO review, 15300
 airports, Federal aviation regulations, 4759, 14009, 16557
 allied health professions personnel training act of 1966, law, 463

INDEX 1967

Grants-in-aid—Continued
 anti-crime program, assistance to State and local governments, hearings, 12306
 Appalachian regional development, supplements, 13713
 law, 17548
 reports, 7788, 14957, 16265
 awarded by National Institute of Mental Health for graduate and undergraduate training, 7066
 bilingual education, hearings, 15170, 16321
 child food service program—
 amend act, hearings, 9139
 closing nutrition gap, 15871
 law, 373
 report, 663
 children in need, federally assisted program, Cleveland, etc., study, 4386
 civil rights compliance officer's manual, 1906
 clean water, Federal grants, 11069
 Commercial Fisheries Bureau graduate educational grants, 17774
 community action program—
 grantees, directories, 982, 7873, 10906
 management, information reporting by community action agencies, 13939
 community development district act, rural America, reports, 622, 10748
 community facilities for mentally retarded, progress report, 14629
 congressional review, periodic, provide, etc., hearings, 735
 constitutionality under certain acts, judicial review, report, 10729
 cropland adjustment program, Greenspan way, general information, 5672
 demonstration cities and metropolitan development act of 1966—
 law, 465
 law, summary, section-by-section analysis, legislative history, and conference report, 725
 title 1, program guide, 4909
 dental public health, research, research training, fellowships, 8632
 disaster relief, status of funds, 7603
 District of Columbia participation in medical assistance program, report, 13645
 Economic Development Administration—
 grants and loans for public works & development facilities, 7869, 13935
 planning grants for economic development, 13932
 program for building communities with jobs, 13928
 economic development districts, 9380
 education—
 attracting and qualifying teachers—
 law, 12176
 reports, 12275, 13643, 13805
 construction of television and radio broadcasting facilities, etc.—
 hearings, 10824, 13710
 reports, 10756, 14980
 elementary and secondary—
 administration of programs, notes and working papers, 10865-867
 amendments of 1966, law, 462
 amendments of 1967, hearings, 7742, 9153, 12419, 17064
 amendments of 1967, reports, 9118, 10557
 PACE projects to advance creativity in education, supplementary centers and services, etc., 10940-941
 school year 1965-66, highlights, 15218
 ESEA, title 1, 1968 application forms, instructions, 16503
 ESEA, title 2, guidelines, 16513
 handicapped children—
 guidelines for State plan programs, 10933
 preparation of professional personnel, 7897

Grants-in-aid—Continued
 education—continued
 handicapped, Education Office programs, 4716
 programs, who and where to apply, etc., 7907
 States report under elementary and secondary education act of 1965, 7890
 students in vocational, college, and graduate programs, 2177
 title 3 programs under NDEA, notes, etc., 17668
 Education Office financial assistance programs for State and local governments, etc., 2183
 educational and cultural exchange program, opportunities, 14678
 educational financial aids for dependents of Army personnel, 17383
 elementary and secondary education act—
 PACE, projects to advance creativity in education, supplementary centers and services, etc., 17723
 title 3, stepping up with PACE, 7915
 environmental engineering and food protection, research grants, 5463
 Farmers Home Administration, community centers, etc., hearings, 15145
 Federal assistance for educational planning, acquiring and developing sites and constructing facilities, guide, 10931
 Federal beautification and open-space land programs, questions and answers, 4902
 Federal financial assistance for projects in aging (series), 13192-194
 Federal funds for day care projects, 8792, 10140
 Federal incentive grants for municipal waste treatment, report, 8610
 Federal money for education, 1967 report, 7908
 Federal programs—
 aiding State education agencies, 13961
 withdrawal of cash from Treasury for advances, 7207
 Federal support for academic science and other educational activities in universities and colleges, 13011, 17057
 Federal system as seen by Federal aid officials, results of questionnaire, print additional copies, reports, 4597, 10585
 geographic distribution of Federal funds for research and development, 13012
 gold mining subsidies—
 hearings, 12302
 report, 16288
 graduate educational grants in aquatic science, 1967-68 academic year, 1077
 health, allied professions, educational improvements, 2807
 health planning and services—
 hearing, 12305, 17670
 law, 461
 reports, 16230, 16247
 health research facilities program, annual report, PHS, 524, 12207
 health services, coordinated funding by HEW and OEO, 13938
 health services project grants manual, changes, 10052
 HEW research grants, establishing indirect cost rates—
 guide for educational institutions, 8189
 guide for hospitals, 12620
 higher education act of 1965—
 administration of programs, 1966, notes and working papers, 12422
 Institutional assistance grant program, spring 1967, 16502
 title 3, strengthening developing institutions, 2185
 higher education amendments of 1966, law 464
 higher education amendments of 1967, hearings, 15026

Grants-in-aid—Continued

higher education, graduate academic facilities program, preparation and submission of proposals, manual, 17718
 highway beautification, 1968 authorizations—
 hearings, 15174
 reports, 15126, 16272
 highway construction act of 1966—
 hearings, errata, 4656
 report, 638
 highway program—
 Federal aid in construction of roads, laws, compilation, 1988
 research and development studies using Federal-aid funds, 2845
 toll facilities relationship—
 hearings print additional copies, report, 643
 report, 14989
 highway relocation assistance study, 16340
 highway safety report, 646
 highway statistics, 13101
 historic sites preservation—
 law, 354
 report, 673
 hospitals, etc., in D.C., project grants for construction and modernization, hearing, 16405
 housing, urban renewal project characteristics, 15726
 improvement of State and local personnel administration, etc., hearings, 12409
 information system to aid in participation in programs study, hearings, 4639
 intergovernmental cooperation in management of programs, improving, hearings, 4639, 13864
 international education law, 412
 juvenile delinquency prevention, etc.—
 hearings, 16324
 message from the President, 5999
 report, 16249
 law enforcement and criminal justice assistance act of 1967, reports, 13670, 13685
 law enforcement assistance act, report, 11292
 law enforcement, Federal assistance, amend act—
 law, 502
 reports 635, 929
 library services and construction act, extend and amend—
 law, general information, 1135
 report, 16298
 manpower research institutional program, progress report, 16795
 manpower research sponsored by Labor Dept., guidelines for grants, 6591
 medical assistance under title 19 of social security act, limitations, report, 697
 mental health amendments of 1967—
 hearings, 9163
 law, 12173
 reports, 9136, 10599, 12366
 mental health research grant awards, 1948-63, listing by State, etc., 13083
 mental health, support programs of NIMH, 18174
 mental health training grants program, 1965, statistical sourcebook, 7076
 mental retardation facilities, extend, etc., laws—
 hearings, 10659, 17666
 reports, 14971, 16246
 military assistance program addresses, MILSTRIP, 4679
 change, 6162
 supplement, 16472
 national defense student loans, college work-study program, and list of participating institutions, 1001
 National Heart Institute, congenital heart disease, research review, 15677

Grants-in-aid—Continued

National Institute of Child Health and Human Development, training support, 13194
 National Institute of Mental Health training grants for support of mental health personnel, current status, 2839
 National Institutes of Health, guide, 17143
 National Science Foundation, 8566
 neighborhood facilities grant program for enriching community life, 2380
 nurse training improvement, project grants, guidelines, 18164
 nursing homes, open every door, Nation's goal for compliance with title 6 of 1964 civil rights act, 13183
 outdoor recreation, manual, 3665, 7026-28, 13037-40
 overseas projects in education, research or study, 1014
 partnership for health, information and policies on grants—
 for comprehensive areawide health planning, 17156
 to States for comprehensive health planning, 15702
 to States for public health services, 13086
 periodic congressional reassessment of Federal grants to State and local governments, 16414
 population conference, hearings, 956, 2121, 4642, 6112
 Index, 16416
 Public Health Service—
 construction grant programs, labor standards provisions, 8637
 funds, 1966—
 construction of facilities, 1755
 health services, formula, project, regional medical planning grants, etc., 8644
 research funds, 7085
 summary tables and graphic highlights, 15706
 grants to Washington State, GAO review, 14160
 mental health research, 14630
 mental health training, 14631
 research grants, awarded, 1966, index, 8647
 research projects in accident prevention, references to publications, 8645
 research projects, policy statement, 11756
 training grants, traineeships, fellowships, etc., 7086
 training projects, policy statement, 13091
 public works grant rates in qualified areas under Public works and economic development act, 4685, 15202
 radiation workers, recordkeeping, hearings, 1974
 rat control and extermination, hearings, 10641
 rat extermination act of 1967, reports, 1284, 13676
 regional medical programs in heart disease, cancer, stroke, guidelines, 13076
 research grant program in NIH, administration, report, 17575
 research grant program of NIMH, 1965, descriptive data sourcebook, 15707
 research method for scientific information retrieval system, 7064
 resource and conservation development projects, cost sharing, report, 16368
 revenue sharing and its alternatives, what future for fiscal federalism?—
 committee print, 13546
 hearings, 16149
 science and technology, degree profile and Federal contributions to universities, etc., 14560

INDEX 1967

Grants-in-aid—Continued

- science, mathematics, and foreign language instruction in public schools, etc., guidelines, 13956
- scientific manpower, utilization, hearings, 4652, 10869
- sea grant colleges—
 - law, 492
 - reports, 632, 679
- solid waste disposal, summaries of research and training grants, 10063
- State technical services program, amend act to include Guam—
 - law, 475
 - report, 891
- State vocational rehabilitation services—
 - hearings, 15172, 17600
 - law, 16144
 - reports, 14972, 16366
 - 6 steps forward, 17186
- urban mass transportation, increase, reports, 620, 628
- urban mass transportation program, emergency provisions, temporary extension—
 - law, 13522
 - reports, 12388, 13634
- urban planning assistance, Federal grants available, summary, 2381
- veterans' medical care and treatment, etc., agreement with Philippines, 14685
- veterinary medical education facilities construction and student loan program, 423
- vocational education amendments, hearings, 4532
- vocational rehabilitation, new programs, progress, report, 5589
- water and sewer facilities grant program, HUD consumer bulletin, 17838
- water pollution control—
 - law, 12156
 - text, 6340
- water pollution control research and training grants—
 - awards, 1966 list, 2274
 - publications and reports, 1965 Index, 11071
- water systems, waste disposal systems, financial assistance to small towns and rural groups in Oklahoma, questions and answers, 7945
- welfare funds to Alabama, cutoff, hearings, 6096
- Grapes, production, use, value, 1965-66, by States, 14695
- Graphic methods, agricultural economics, graphic analysis, applications, 4099
- Graphic presentation, 17691
- Graphite:
 - absorption of carbon dioxide at 0° C, 5351
 - artificial, chemical impurity data, 18040
 - optical properties, 16849
 - oxidation of JT graphite composites, static, subsonic, and supersonic test, 18053
 - surface in high-temperature airflow, effects of nitrogen injection into boundary layer, 12964
 - welding graphite materials, USSR study, 15395
- Graphitic oxides, reverse osmosis membranes containing, 6444
- Graphs, *see* Charts.
- Grapple, self-actuating, automatically engages and releases loads from overhead cranes, 5150
- Grapsas, Athanasia, *see* Argere, Athanasia.
- Grass fires, *see* Forest fires.
- Grasses:
 - culture, etc., publications, price list, 5417
 - grass, rancher's crop, 5636
 - grass range, establishing in southwest Missouri Ozarks, 14092

Grasses—Continued

- grass seed production and harvest in Great Plains, 7271
- native sandhills, Valentine National Wildlife Refuge, Nebraska, descriptions, etc., 16621
- range, Arizona, vegetative key, 11141
- see also* Bluestem—Bunchgrass—Muhlenbergia.
- Grasshoppers, control, 15848
- Grasslands, research, statistical methods, abstract bibliography, 10185
- Gratings and networks of ribbons as radio reflectors, 16902
- Gratuities:
 - reporting your tips for tax purposes, 2408
 - special information about social security for people who receive cash tips, 17204
- Gravel:
 - grit, test of types in alleviating lead poisoning in mallards, 17786
 - minerals yearbook chapter, 5133
- Graveson, Robert T., point source detection by scintillation survey meter, 1787
- Gravimeters, results of USSR investigation on board ship, 8274
- Gravimetry:
 - effects of petroleum and natural-gas reservoirs on mass properties of sedimentary rocks, 12608
 - report, 14518
 - see also* Thermogravimetry.
- Gravity:
 - effects on mercury droplet behavior, photographic study, 1509
 - evaluation of semi-active gradient system—
 - appendices, 2598
 - technical summary, 2597
 - fluid boiling in discrete bubble region, effects of gravity level, 15562
 - geologic interpretation of gravity and aeromagnetic maps of Tintic Valley area, 8164
 - GEOS-A gravity gradient satellite (Explorer XXIX), stabilization system analysis and performance, 17940
 - liquid hydrogen in spherical tankage, normal gravity self pressurization, 18019
 - loaded rock, stresses and displacements surrounding open pit, 14356
 - reduced fields, experiments to investigate particulate materials, 18000
 - resonant librating orbits, use in studying earth's gravity, 14476
 - self-locomotive performance of lunar explorers based on experimental reduced-gravity studies, 11501
 - surveys of parts of Canyonlands National Park, 2368
- Gray, Brian E., direction, for commanders and public information officers, 3209
- Gray, James L., soil survey of St. Francis County, Ark., 2875
- Gray County, Tex., soil survey report, 8697
- Gray Line Sightseeing Tours, Inc., motor carrier accident, 17917
- Grays Harbor, basin, Lincoln Creek formation, 12603
- Grazing:
 - associations, increasing farm and ranch income through membership, 1717
 - cattle grazing on ponderosa pine-bunchgrass range in Colorado, effects, 14764
 - comandra, grazing, and comandra blister rust, 14127
 - permits, cancellation, fix compensation, 4576
 - range and related grazing lands, national handbook, 15745
 - Taylor grazing act as amended and supplemented, 15457
 - see also* Pasture lands—Public lands.
 - Grease, world production and trade, 4817
 - see also* lubricants.

Great Bahama Bank, myodocopid ostracod
Euphloemides multichelata, 8543

Great Britain:

air transport services, agreement, 7152
availability of certain Indian Ocean
islands for defense purposes, agreement,
11546
background notes, 1622
Bahamas long range proving ground,
agreement, 17241
colored minorities and present policies,
9747
double taxation, convention, agreement,
2921
east coast of England, Sailing directions,
change, 11094
educational commission and financing of
exchange programs agreement, 13149
establishing business in United Kingdom,
17476
European and British Commonwealth se-
ries, 1626, 10099
hops industry, 8047
indemnification for losses arising from
ammunition shipments, agreement, 7184
lights and fog signals, list, 5334, 11044
maritime matters, visit by N.S. Savannah
to Hong Kong, agreement, 15795
mineral industry, minerals yearbook chap-
ter, 12808
monopolies exploit Persian Gulf, 1188
tariff concessions, staging, amending agree-
ment, 15803
tracking station on Antigua, agreement,
8749
tracking station on Mahé Island, Seychel-
les, agreement, 11847
tracking stations, agreements, 2911, 5536,
8750
travel to United States, market survey,
5582
treaties concluded with United States,
continued application to—
Botswana, agreement, 11839
Lesotho, agreement, 8742
weather stations, cooperative meteorologi-
cal program in Cayman Islands, agree-
ment, 7192
west coasts of England and Wales, sail-
ing directions, change, 8570
Great days ahead (remarks), 1696

Great Lakes:

aquatic sciences in area, 2241
atmospheric water vapor aloft over basin,
total distribution, 18833
basin, consent to compact, hearings, 731
fisheries—
annual summary, 9502
convention with Canada, amending, re-
port, 6064
Indians of area, general information, 2390
light list and other marine aids, 9003
modification of nearshore currents by
coastal structures, 8326
navigation, rules of road, 221
notice to mariners, 3642, 9006
pilot, survey, 8325
supplements, 11335, 12777, 14309,
16834-836
piloting, 1966, statistical report, 12139
piloting services, agreement with Canada,
14689
rules concerning sailing vessels, etc., law,
468
small craft, gale and whole gale warning
facilities charts, 14723-724
snow depth probability charts and tables,
12776
water pollution, control, etc., in region,
hearing, 738
water pollution control project, Lake On-
tario program, 9501
Great Lakes Pilotage Administration, sta-
tistical report, 12139
Great Lakes Regional Commission, see Up-
per Great Lakes Regional Commission.

Great Lakes States:

balsam fir, botanical and commercial
range, 8069
northern region, economic survey, 7680
pulpwood, rising prices stimulate largest
Lake States harvest, 14101
tamarack, botanical and commercial range,
8070
veneer log production shows increase,
14096
veneer yields from Lake States, quaking
aspen, 1095
Great leap backward, Soviet view of China's
economic problems, 16780
Great Meadows National Wildlife Refuge,
general information, 17775
Great Plains:
dryland farms, organizing and operating,
regional research project GP-2, sum-
mary, 7883
grass seed production and harvest, 7271
northern—
growing fruit for home use, 7272
shelterbelts, 1689
northwestern Plains States, iron and steel
scrap, processing and marketing, 16855
southern, woody vines, selecting, planting,
etc., 1688
Great Salt Lake:
brines, desulfation processing, preliminary
studies, 6688
relicted lands, convey lands lying below
meander line in Utah, hearing, 4643
Great Salt Lake National Monument:
establishment—
hearings, 1213, 7815, 12412
report, 9273
Great Sand Dunes National Monument, gen-
eral information, 9959
Great Smoky Mountains National Park:
brook trout, technical paper, 17787
general information, 9960
Great Society:
Americans can aspire to Great Society here
and abroad (address), 26
creative federalism, concept (address), 25
Great South Bay, eastern section, pollution
of navigable waters, conference proceed-
ings, 6339
Great White Heron National Wildlife Refuge,
birds of Florida Keys national wildlife
refuges, list, 17780
Greatest storm on earth, hurricane, 17738
Greece:
background notes, 10091
canned deciduous fruit industry, 17792
Educational Foundation and financing of
exchange programs, agreement, law, 470
establishing business in, 9018
loan of 1929, settlement acceptance, law,
470
maritime matters, liability during private
operation of N.S. Savannah, agreement,
11856
mineral industry, minerals yearbook chap-
ter, 15468
refunding of indebtedness due, agreement,
8735
selling in Greece, 4440
war or peace in Middle East, study mission
report, 10837
Greece, N.Y., population, special census of
town, 16020
Greek language, basic course, 14677
Green, Barbara, basic data on economic of
Jamaica, 13461
Green, L., use of thin-layer chromatography
(TLC) for identification of aircraft engine
oil components, 11674
Green, Lisle R., picloram herbicide for kill-
ing chaparral species, preliminary rating,
5085
Green, M. S., critical phenomena, 1521
Green Bay, Wis.: area wage survey, 5061
water pollution control, comprehensive
plan for area, 14050

INDEX 1967

- Green coffee inventories, imports, and roastings, 3384
- Green River formation:
Colorado, shale oil specific gravity, stratigraphic and geographic variation, 2587
- Utah and Colorado, geology and fuel resources, 12610
- Green River, Howard Hanson Dam, outlet works and stilling basin, hydraulic model investigation, 2201
- Greenbaum, Leon J., Jr., compressed air, diving and submarine medicine, 14314
- Greenbrier County, W. Va., coal, carbonizing properties, 2576
- Greene, Frank M., new near-zone electric field-strength meter, 5291
- Greene, John M., variational principle for stationary magnetohydrodynamic equilibria, 12008
- Greene, Wallace M., testimony, hearings, 16394
- Greenland:
approach roads, 15932
- cores, particulate content, 17374
- east, sailing directions, change, 14571
- firm, artificial radioactivity reference horizons, 4197
- ice core from, stratigraphic analysis, 13290
- lights and fog signals, list, 5331, 9972, 14573
- mineral industry, minerals yearbook chapter, 8350
- north, Tuto ramp, ice surface movement, 11983
- tide tables, 12119
- Greensite, Arthur L., analysis and design of space vehicle flight control systems, 12871-873, 14383-384, 15497-501, 15503
- Greenspan, Martin, engineering and instrumentation, journal of research, 3400
- Greenspan, questions and answers, 11926
- Greenspan way to more space for parks, recreation, wildlife, 5672
- Greenville, S.C., area wage survey, 14288
- Greenville quadrangle, Maine, geology and petrology, 16684
- Greenwood, J. E. G. W., geology of Arabian Peninsula, 8173
- Greenwood, Lawrence R., outgassing rates of solid rocket fuels in vacuum, 5262
- Greenwood, R. C.:
evaluation of thermal neutron capture gamma ray techniques for nondestructive analysis of reactor burnable poisons, 1790
- prompt gamma rays from radiative capture of thermal neutrons, 5776
- Greer County, Okla., soil survey report, 10088
- Grelen, Harold E., common plants of longleaf pine bluestem range, 2334
- GREMEX, new management training concept, 9852
- Grenada County, Miss., soil survey report, 11805
- Grice, George D., bathypelagic calanoid copepods of western Indian Ocean, 8548
- Grid systems, *see* Maps and charts.
- Griffin, Russell E., dielectric constants and dissipation factors for 6 rock types between 20 and 100 megahertz, 9765
- Griffith, J. R., filament-winding plastics, syntheses, properties, and uses of m-amino-benzyl amine (MABA), 9989
- Griggs, Roy L., geology and ore deposits of Steele Rock mining district, Grant County, N. Mex., 6390
- Grimes, Annie K., annotated bibliography on climate of Republic of Vietnam, 16539
- Grinders, bench and floor stand grinder, how to inspect chart, 9686
- Grinding machines, *see* Grinders.
- Grinding wheels, *see* Abrasives.
- Grisez, T. J., pruning open-grown black cherry, 17803
- Grit, *see* Gravel.
- Grit blasting nozzle fabricated from mild tool steel, etc., 6762
- Grits, corn, good choice for thrifty family, food value, use, recipes, 9340
- Groceries:
price-marking in warehouses, use of adhesive labels, 10155
- wholesale business, fair labor standards act, application, 11896
- wholesale institutional orders, determining costs of servicing, 4120
- Grocery stores, *see* Stores.
- Grocery trade, *see* Stores.
- Groins (hydraulic engineering), *see* Jetties.
- Groom, Phyllis, prices in poor neighborhoods, 14305
- Groom mining district, Nev., Cambrian and Precambrian rocks, 14169
- Gropp, Mrs. Matteo, relief, 10532, 13517
- Grose, L. T., coal resources of southwestern Utah, 8341
- Gross, Arthur L., calcium, phosphorus, and nitrogen mobilization resulting from conditions of inactivity in *Macaca irus* monkeys, 5707
- Gross, D., field burnout tests of apartment dwelling units, 18075
- Gross, Ronald, United States and UNESCO, challenges for the future, 10105
- Gross national product:
calendar year 1965, current market prices, 6469
- growth rates and trend data by region and country, 8228
- statistical tables, 1829
- Grosser, Bernard I., geographic and astronomical distance responses by rated officers, 4174
- Grossling, Bernardo F., internal magnetization of seamounts and its computer calculation, 12612
- Ground, *see* Land.
- Ground effect, 4-propeller tilt-wing configuration over fixed and moving ground plane, 11504
- Ground effect machines, free-flight characteristics and handling qualities of GEM III, 9880
- Ground instructors:
examination guide, basic-advanced, 4813, 17789
- Federal aviation regulations, 11001
- Ground rods, rod and rod section, Federal item identification guide, 10895
- Ground water, *see* Water.
- Grounds, *see* Public property.
- Group behavior, groups in disaster (paper), 10049
- Group insurance, *see* Life insurance.
- Group practice facilities program, information guide and instruction handbook, 14024
- Grouping by ability, *see* Ability grouping in education.
- Grouse, damage on true firs, 1090
- Grouting, foundation, field technique and inspection, engineering and design manual, 2211
- Grove, Richard, museums come alive, 9402
- Grover, Horace J., fatigue of aircraft structures, 17082
- Growing boxwoods, 5032
- Growing dates in United States, 29
- Growing ginseng, 14742
- Growing grain sorghum, 4117
- Growing raspberries, 4105
- Growing table beets, 4113
- Growth:
children, research programs, studies in progress, 8967
- gibberellin-induced, a dormant sweetgum, 8093
- growth retardation under 3 species of oaks, observations, 11130
- height, mahogany seedlings, St. Croix, V.I., 12575

Growth—Continued

- loblolly pine's diameter growth and foliar nitrogen in fertilized soil, 8094
- lodgepole pine, low stand density speeds tree growth, 11117
- paper and yellow birch in simulated strip cuttings, 4849
- periodic cubic growth in natural loblolly stands near Crossett, Ark., 2324
- pinus in Hawaii, 4854
- queensland maple seedlings in Hawaii, growth accelerated after first year, 8090
- thinning and fertilizing increase growth in western white pine, 6367
- trees, accuracy of mean-growth estimates made with dial gage dendrometers, 8079
- Grozaz, G., artificial radioactivity reference horizons in Greenland firn, 4197
- Grubb, Lynn S., interfacial behavior following termination of outflow in weightlessness, 8501
- Gruening, Ernest:
 - disposal of United States military installations and supplies in France, 6109
 - United States foreign aid in action, 2122
- Gryzinski, Michal, theory, cross section for metastable state of atomic hydrogen, 9874
- GSA, see General Services Administration.
- Guadalupe Mountains National Park, establishment, law, 386
- Guam:
 - census of agriculture, 1964, State and county statistics, 19398
 - county business patterns, 13385
 - economic development, promote, report, 15134
 - Foraminifera, smaller, 1119
 - general information, 9584
 - geology and hydrology of Guam, Mariana Islands (series), 1119
 - Governor, annual report, 9585
 - Governor, etc., popular election, provide, amend organic act—
 - hearings, 10852
 - report, 10750
 - include in State technical services act of 1965—
 - law, 475
 - report, 691
 - nautil chart catalog, 7558
 - nurses in public health, number, educational preparation, etc., 17155
 - plant regulatory officials, 5618
 - social security tax guide for employers, 2402
- Guaranties and sureties:
 - companies acceptable as sureties on Federal bonds, list, 15811
 - informational media guaranty program, financing—
 - hearing, 10834
 - report, 10767
 - investments, agreement with—
 - British Guiana, 2887
 - Cameroon, 10104
 - Ghana, 10104
 - India, 2909
 - Lesotho, 11865
 - Malta, 8748
 - Paraguay, 7187
 - Philippines, 5544
 - Zambia, 2933
 - loan guaranties, payment by ICC, appropriation, 10699
 - specific risk investment guaranty handbook, 4925
- Guard duty, Army field manual, 10262
- Guard rails, see Roads and highways.
- Guardrails (road), see Roads and highways.
- Guards (persons):
 - examination announcement, 4491
- Guarino, Joseph L., maple reduction in an urban roost, 16635

Guatemala:

- background notes, 5521
- mineral industry, minerals yearbook chapter, 14331
- south coastal, early cultures and human ecology, 9954
- Guereca, Ross A.:
 - concerning physical parameters for use in absolute gas viscosimeter, 11378
 - steady-state laminar flow boundary conditions for stainless steel coiled-capillary viscosimeter, 14350
 - thermophysical properties of selected gases below 300° K, 6635
- Guernsey, John, teens sound off, 17726
- Guernsey cattle, see Cattle.
- Guerrilla warfare, counter guerrilla operations, Army field manual, 8881
- Guest, Stanley, far-field acoustic environmental predictions for launch of Saturn V, etc., 16981
- Guidance:
 - bibliography, Air Force Academy Library, 5689
 - career guidance, report of Subcommittee on Career guidance of Committee on Specialized Personnel, Labor Dept., 11293
 - national defense education act of 1958, institutes, program, 6189
 - publications of State Departments of Education, guide, 6185
 - report of President's Commission on Status of Women and report of Committee on Education, excerpts, 7236
 - State Dept. of Education personnel directory, 6178
 - theory, papers, compilation, 12881
 - see also Counselors—Vocational guidance.
- Guidance systems:
 - automatic guidance of automobiles, prospects, USSR study, 16762
 - electromagnetic study, 16896
 - guidance computer memories, present and future state of the art, 18049
 - helicopters flying over mountains at night, tests, 8089
 - space, test with star/horizon simulator, 11447
 - spacecraft, 6730
- Guide books, Commerce Department, agency of business, promotes economic growth, 5063
- Guide for educational institutions, establishing indirect cost rates for HEW research contracts, etc., 8189
- Guide for hospitals, establishing indirect cost rates, for HEW research contracts, etc., 12620
- Guide specification for 1000-gallon aircraft fire and rescue truck, 10246
- Guide to Federal consumer services, 13064
- Guide to natural beauty, 11936
- Guide to record retention requirements, 7990
- Guide to specifications and standards of Federal Government, 4885
- Guided missiles, see Missiles.
- Guidelines—
 - Business Opportunity-Federal Procurement Conference program, 8923
 - evaluation of contractor accounting systems, 6705
 - employment testing procedures, 2227
- Guido, Pedro I., relief, 9079
- Guilbert, Edward A.:
 - remarks—
 - Nov. 1, 1966, 236
 - Nov. 18, 1966, 1951
- Gullford County, N.C., population, special census, 10370
- Guillou, R. B.:
 - aerial radiometric survey, 7426
 - Orlando area, ARMS-2, 1780
 - Parr area, ARMS-2, 1781
- Guinand, Jerome B., oil and gas lease, reinsurance, report, 10740

INDEX 1967

Guinard, Norman W., NRL terrain clutter study phase 1, 14591
Guinea:
 labor conditions, 5075
 mineral industry, minerals yearbook chapter, 8351
 U.S. travelers, you can assist U.S. balance of payments, 11887
Gulf, see name of gulf, or place where located.
Gulf Coast:
 floods, eastern basin, Ogeechee River to Pearl River, 2374
 frequency distribution of rainfall in tropical storms (paper), 5593
 light list, Little River, S.C., to Rio Grande, Tex., and Antilles, 12123
 nautical chart catalog, 4415
 shrimp data, 3386
 transportation lines, 13984
see also Gulf States.
Gulf County Canal:
 modification, engineer report—departmental edition, 2209
 document edition, 1998
Gulf Intracoastal Waterway, see Intracoastal Waterway.
Gulf of Aden, see Aden, Gulf of.
Gulf of Mexico, see Mexico, Gulf of.
Gulf of Suez, see Suez, Gulf of.
Gulf Series in subsurface of northern Florida and southern Georgia, 16892
Gulf States:
 fisheries, annual summary, 8018
 strawberry culture, 1685
Gulf Stream, photogrammetric research work, 5941
Gulick, J. W.:
 remarks—
 Feb. 10, 1967, 6628
 Feb. 23, 1967, 6627
 May 5, 1967, 9751
 July 17, 1967, 12787
 Oct. 12, 1967, 17907
 Oct. 25, 1967, 17908
Gullander, W. P., address, Nov. 1, 1966, 8616A
Gulles, Harrison County, Iowa, 1722
Gum naval stores, see Naval stores.
Gunderson, Robert W., transformation to phase-variable canonical form, 12923
Gunner's mates, G 1 & C, Navy training course, 8577
Guns, see Explosive guns—Firearms.
Gunter, Edgar J., jr., dynamic stability of rotor-bearing systems, 1439
Guralnick, Lillian, selected family characteristics and health measures reported in health interview survey, 7097
Gursky, H., celestial X-ray sources, 8428
Gust loads, see Load (mechanics).
Gustafson, Paul R., 1,4 cyclohexaneblis (methylamine), regenerative carbon dioxide absorbent, 8589
Gut Dam, claims, agreement with Canada, 8725
Gutierrez, Orlando A., steady-state performance of multitude, centrally finned, potassium condensing radiator, 18032
Guy, R. W., effect of orifice size and heat-transfer rate on measured static pressures in low-density arc-heated wind tunnel, 6876
Guyana:
 agricultural production, indices, 4700
 background notes, 1615
 British Guiana investment guaranties, agreement, 2887
 foreign trade regulations, 230
 mineral industry, minerals yearbook chapter, 14330
 Peace Corps volunteers, agreement, 15787
 special study mission, report, 10568
Gwinnett County, Ga., soil survey report, 15748
Gylden method, see Mathematics.

Gymnastics, see Exercise.
Gymnodinium breve, west coast of Florida, 1964-65, distribution and occurrence, 8039
Gymnosporangium clavariforme in witches'-brooms of Juniperus communis, 8809
Gypsum, mineral industry survey, quarterly, 3587
Gypsy moths, bacteria of living and dead larvae of Porthetria dispar, 8075

H

H.E.W., see Health, Education and Welfare Department.
Haar, Charles M., remarks, Sept. 21, 1967, 16714
Habeas corpus:
 District of Columbia jail inmates, authorize transfer to other institutions notwithstanding pendency of petition, reports, 875, 12393
 State custody, revise procedures, law, 425
Hackett, Gerald A., executive calendar, Senate, 3503
Haddon, William, jr.:
 addresses, etc.—
 Nov. 16, 1966, 1940
 Nov. 29, 1966, 1964
 Dec. 1, 1966, 1965
 Dec. 11, 1966, 4423
 Feb. 16, 1967, 5959
 nomination, hearings, 6095, 15153
Hadley, H. H., herbicides for forest plantations, 12571
Hadrons, production reactions, consequences of unitary symmetry, tests, 5759
Hady, Thomas F., taxation of farmland on rural-urban fringe, 16486
Haematochiton, see Beetles.
Hafnium:
 carbon phase diagram, investigation, 14340
 determination of zirconium in, 9955
Hagan, Robert L., paper, Aug. 14-15, 1966, 4304
Hagen, Hermann, caddis flies, types of species described, 14542
Hagermann, Madeline G., education directory, 1966-67, pt. 1, State governments, 15211
Hague Conference on Private International Law:
 convention on service abroad of judicial and extrajudicial documents in civil or commercial matters—
 message from the President, 6060
 report, 7774
Hahn, G. T., plastic constraint ahead of sharp crack under plane-strain conditions, 7108
Halder, Walter:
 foreign trade regulations of—
 Dominican Republic, 4442
 Haiti, 13457
Haight, Gardiner M., JAG Journal, 3452
Hall, processes, work of Caucasus anti-hall expedition, 1965, results, USSR study, 12681
Hall insurance, crop-hall insurance 1965, volume, cost, indemnities, 9392
Hain, G., auto-diagrammer, 2682
Haines Road, winter maintenance, agreement with Canada, 8728, 17230
Hair, Dwight, demand and price situation for forest products, 5660
Haiti, foreign trade regulations, 13457
Haji-Morad, Ali, see Morad, Ali Haji.
Hale, Elwyn C., oil lease, reinstatement, 10704
Hale, Henry B., seasonal changes among endocrine-metabolic indices of men residing in subtropical climate, 7358
Hale, Peter B., basic data on economy of Turkey, 5952
Hale, William N., water requirements and uses in Montana mineral industries, 2539
Haleakala National Park, general information, 8557

Haliotidae, *see* Gastropods.
 Hall, Dale O., broadcast seeding ponderosa pine on Challenge Experimental Forest, progress report, 16640
 Hall, Delight, catalogue of Alice Pike Barney memorial collection, 2747
 Hall, Edward T., manpower potential in our ethnic groups, 17885
 Hall, Jay V., Jr., wave tests of revetment using machine-produced interlocking blocks, 16519
 Hall, Leo P., aerodynamic characteristics of V/STOL model with lift and lift-cruise fans, 14484
 Hall coefficient of tantalum carbide as function of carbon content, etc., 18018
 Hall County, Tex., soil survey report, 14655
 Hall of medicine, 2153
 Hallucinogen:
 bibliography—
 hallucinogenic drugs, 14072
 hallucinogens, 12560
 fact sheet, 12557
 Halogens:
 primary cells utilize halogen-organic charge transfer complex, 6837
 synthesis of highly halogenated monomers and polymers, 9855
 Halver, John E., trout hepatoma research conference papers, 11090
 Hamburger, Richard, remarks, Nov. 10, 1966, 1819
 Hamill, Bruce, lighting for outdoor recreation, 10331
 Hamill, Thomas D., effect of subcooling and radiation on film-boiling heat transfer from flat plate, 14453
 Hamilton, Alexander, Freedoms Foundation's new building dedicated in his name (remarks), 2954
 Hamilton, James E., F-4C flight simulator dashblindness experiment, 1738
 Hamilton, Thomas E., production, prices, employment, and trade in Pacific Northwest forest industries, 3774
 Hamilton, Warren, nature of batholiths, 6403
 Hamilton, Wayne L., measurement of natural particulate fallout onto high polar ice sheets, 17374
 Hammershead sharks, *see* Sharks.
 Hammond, George R., study of left moving thunderstorm of Apr. 23, 1964, 10965
 Hampshire, Gifford D., FDA papers, 4814
 Hampton, Robert E., nomination, reappointment, hearing, 7824
 Hampton, Va., area wage survey, 16816
 Hampton National Historic Site, general information, 13007
 Hancock County, Miss., Mississippi Test Facility, ground-water supplies, development, 8183
 Hand, Cadet, new species of burrowing acantiate anemone, 6952
 Hand cleaners, *see* Soap.
 Hand tools:
 Defense Dept. stocks, transfer to GSA, GAO review, 9546
 Federal item identification guides for supply cataloging, supplements, 3286
 GSA stock catalog, 6334
 supplements, 4797, 11067, 16608
 Hand trucks, safe practices, 9721
 Handbooks, *see* names of departments, etc., issuing handbooks—*also* subjects.
 Handcar Project, *see* Project Handcar (plow-share program).
 Handicraft, *see* Handicraft.
 Handicapped:
 children—
 education—
 preparation of professional personnel—
 grant program, 7897
 manual, 16508
 State plan programs, guidelines, 10933

Handicapped—Continued
 children—continued
 feeding the child with a handicap, 13416
 military medical benefits act of 1966—
 law, 365
 report, 664
 economics of handicapped (address), 6179
 education—
 architectural and attitudinal barriers (remarks), 13068
 improve programs—
 hearings, 7742, 9153, 12419, 17664
 reports, 9118, 10557
 education and training adequacy, hearings, 2046, 7741
 Education Office programs, 4716
 employment—
 assistance, Federal and State programs, directory, 15664
 barriers, challenge to handicapped, 1968
 report theme contest, 11th and 12th grade students, announcement, 15667
 role of public relations (remarks), 11702
 unparalleled opportunity (address), 8616A
 housing, minimum property standards, 9582
 multiple handicapped, available Federal services (remarks), 18142
 outdoor recreation planning for the handicapped, 17102
 performance, story of the handicapped, 3680
 physically, accessibility of public buildings, insure—
 hearing, 15173
 report, 15124
 physically impaired workers, work performance, 14612
 placement—
 inspection findings, summary, 10432
 review, coordinator's scorecard, 8990
 President's Committee on Employment of the Handicapped—
 action, program guide, 17121
 awards and recognition program, 1355
 general information, 18147
 programs, Federal role, hearings, 6110
 programs for the handicapped (periodical), 15316
 severely disabled, rehabilitation problems (remarks), 11700
 sheltered workshop clients, fair labor standards act, technical report, 18252
 spouses and children, of active members of Armed Forces, use of private facilities, report, 14941
 Handicraft, encouraging American handicrafts, what role in economic development? 2160
 Handling equipment:
 carriage system remotely moves drawer over extended distance, 6703
 Federal item identification guides for supply cataloging, supplements, 3285, 3293
 fuld handling, classification definitions, 18126
 hydrostatic force used to handle outsized, heavy objects, 12897
 petroleum, Army technical manual, 5746
 Hangover effect of seccobarbital on simulated pilotage performance, 7364
 Hanish, S., tables of spheroidal wave functions, etc., 10002, 10010, 17087
 Hanley, H. J. M., viscosity and thermal conductivity coefficients of dilute neon, krypton, and xenon, 11589
 Hanna, Paul R., phoneme-grapheme correspondences as cues to spelling improvement, 1010
 Hansen, Henry A., waterfowl status report, 6357
 Hansen, Wallace R., Alaska earthquake, Mar. 27, 1964, field investigations and reconstruction effort, 8169

INDEX 1967

- Hanson, Mary F., trends in income of families and persons in United States, 16035
- Harbor workers, *see* Longshoremen.
- Harbors:
- facilities, Navy design manual, changes, 2765
 - flood control and multi-purpose projects, public works authorizations—law, 493
 - report, 698
 - flood control, improvements, compilation—departmental edition, 1025
 - document edition, 516
 - flood control, omnibus bill, 1966, hearings, 751
 - see also* names of harbors, or places where located.
- Hard, J. S., identification of destructive Alaska forest insects, 14085
- Hard-of-hearing, *see* Deaf.
- Hard woods, *see* Hardwoods.
- Hardboard, *see* Pulpboard.
- Hardeeville, S.C., motor carrier accident, 16874
- Hardin, Charles H., food and fiber in Nation's politics, 17123
- Hardin, Dale W., nomination, hearing, 15153
- Harding, Katherine, basic properties of matrix algebra, 15464
- Harding, Paul L., evaluating quality of United States-grown citrus fruits in European markets, 5616
- Harding, Richard S., biochemical procedures, 7414
- Harding, Samuel T., Parkfield, Calif., earthquake of June 27, 1966, preliminary seismological report, 1934
- Hardinger, Christine C., basic data on economy of Republic of South Africa, 1944
- Hardness:
- Knopp anisotropy, stereographic representation, 18051
 - pendulum sclerometer for surface studies, 11381
- Hardware:
- aircraft, Army aviation maintenance engineering manual, 8892
 - builders', Army technical manual, changes, 107, 10271
 - data retrieval system provides unlimited design information, 11484
 - Federal item identification guides for supply cataloging, supplements, 3291
 - retailing, bibliography, 7113
 - space, microbiological examination, NASA standard procedures, 15521
- Hardware stores, *see* Stores.
- Hardwoods:
- Appalachian—epicormic branching on 8 species, 8078
 - lumber production, Kentucky and Ohio, costs & returns, 4850
 - use for pallets, laboratory evaluation, 16661
 - controlling off-site hardwoods with 2,4-D amine concentrate, 12583
- Hawaii, multivariate equations developed for volume prediction, 8084
- northern—
- deer browsing after clearcutting, effect on height, etc., 8109
 - designing efficient logging systems using equipment production capabilities and costs, 2330
 - impact of insects, 2304
 - stump sprouting, 8111
- plywood, current industrial reports, 5862, 15997
- sawmills, chip manufacture, cost analysis, 14139
- Hardy, Edward P., jr., Health and Safety Laboratory fallout program, quarterly summary reports, 1785-86, 5774, 10299, 13324
- Hargreaves, John J., man in oxygen-helium atmosphere, 91
- Harkin, John M., lignin production and detection in wood, 8060
- Harlan, James H., exploration of space, supplement, 10227
- Harley, John H., Health and Safety Laboratory, manual of standard procedures, 13356
- Harlee, John:
- addresses, etc.—Dec. 12, 1966, 2246
 - Apr. 18, 1967, 7971
 - Apr. 19, 1967, 7972
 - May 2, 1967, 9456
 - Sept. 19, 1967, 16577
 - Sept. 22, 1967, 16578
- Harmonic functions, Vinti's accurate reference satellite orbit with inclusion of 3d zonal harmonic, differential corrections, 15564
- Harmstonia, *see* Flies.
- Harness, Vernon L., Brazilian cotton, trends and prospects, 9525
- Haroules, George G.:
- absolute temperature measurement at microwave frequencies, 17016
 - radiometric boreighting by sequential logging, 18035
- Harpers Ferry National Historical Park, general information, 11614
- Harper's Ferry, United States Marine Corps, historical reference pamphlet, 12784
- Harrach, Robert J., natural shift of resonance frequency, 2745
- Harre, Edwin A., fertilizer trends, 17261
- Harre, Clarence M., Wyoming iron-ore deposits, 5104
- Harrington, J. F., sources of fertilizer minerals in South America, preliminary study, 1110
- Harrington, T. A., shelterwood method for regenerating sand pine, 9539
- Harris, A. S., effects of slash burning on conifer regeneration in southeast Alaska, 4834
- Harris, C. Cleland, and Associates, Spanish, programmatic course, instructor's manual, 13142
- Harris, Charles D., tension shell and blunted 100° conical shapes for unmanned entry vehicles, 1504
- Harris, Cyril M., sound absorption in air versus humidity and temperature, 6707
- Harris, Edmond S., price wars in city milk markets, 2168
- Harris, George L., area handbook for Thailand, 5734
- Harris, Henry M., hot rolling of oxide-glass compositions, 12820
- Harris, J. Donald, masked DL for pitch memory, 11348
- Harris, James W., relief, 15066, 16226, 17524
- Harris, Julius E., aerodynamic characteristics of spherically blunted cones, 1486, 14488
- Harris, Marshall, your farm rent determination problem, 17311
- Harris, Robert D., analysis and design of space vehicle flight control systems, 15502
- Harrison, Edwin F., use of Jupiter gravity turns for tailoring trajectories to Saturn with consideration of launch opportunities, 2692
- Harrison, Gordon F., Senate manual containing standing rules, orders, laws, and resolutions affecting business of Senate, etc., 10691
- Harrison, James K., thermal characteristics of storage vessel on moon, 5259
- Harrison, R. W.:
- compatibility of biaxially stressed D-43 alloy with refluxing potassium, 11422

- Harrison, R. W.—Continued
stabilization of carbon and nitrogen in stainless steel and its effect on mass transfer in stainless steel-Cb-12r-potassium system, 12864
- Harrison, Ark.:
Crooked Creek and tributaries in vicinity, engineer report—
departmental edition, 10955
document edition, 10700
- Harrison County, Iowa, physiographic history and soils, entrenched stream systems, and gullies, 1722
- Harrold, L. L., evaluation of agricultural hydrology by monolith lysimeters, 5687
- Harold, T. W., thunderstorm motions, heights, and circulations, 6221
- Harry Diamond Laboratories, timers for ordnance symposium, proceedings, 104
- Hart, Clint E., frequency response and transfer functions of nuclear rocket engine system, 11526
- Hart, Elizabeth F., I & N reporter, 3405
- Hart, Gerald E., Hartlobe airborne dual antenna system for IFF, 8587
- Hartley, Jack L., thermography of human dentition, 17357
- Hartley, James, and family, relief, 15067
- Hartman, Bryce O.:
aircrew morale, 4184
hangover effect of secobarbital on simulated pilotage performance, 7364
MOL, predicting 4-hour levels of psychomotor performance from initial half hour, 17355
- Hartman, Joan E., directory of United States standardization activities, 15589
- Hartshorn, Joseph H., geology of Taunton quadrangle, Bristol and Plymouth Counties, Mass., 9560
- Hartzog, George B., Jr., heritage to discover, 2184
- Harvesters, *see* Harvesting machinery.
- Harvesting:
cotton research plots, quick-change sacking attachment, 13198
potatoes and sweetpotatoes, dates, by seasons, in principal areas, 13211
potatoes, cost factors, evaluation, 15873
Harvesting machinery, bulk handling spring crop potatoes from harvester to packing line, methods and costs, 35
- Harvey, Gale A.:
description of 4 fast slitless spectrographs, 18014
photometry of spectrograms of 3 artificial meteors, 9902
slitless absolute spectral photometry, 5247
- Harvey, George M., growth rate and survival probability of blister rust cankers on sugar pine branches, 14103
- Harvey, John M., air transport of California strawberries, factors affecting market quality, 1704
- Harvey, Lulle V., natural gas processing plants, 8372
- Harvey, Thomas W.:
addresses, etc.—
May 17, 1967, 10905
Sept. 15, 1967, 16479
Oct. 12, 1967, 16477
- Harwell, Robert A., relief, 7624
- Hasbani, Youssef S., relief, 12326
- Hasenberger, Werner, reform of French social security system, 17199
- Hastelloy, *see* Nickel
- Hatch, Charles E., effect of partial cutting in overmature lodgepole pine, 14090
- Hatch, Howard G., Jr., dynamic simulation of lunar module docking with Apollo command module in lunar orbit, 11520
- Hatcher, Norman M., survey of attitude sensors for spacecraft, 12882
- Hatcheries, *see* Chickens—Fish and fisheries—Poultry—Turkeys.
- Hatry, Harry P., criteria for evaluation in planning State and local programs, 16411
- Hatton, T. T., maintaining market quality of fresh lychees during storage and transportation, 37
- Hatziasavvas, Christina, relief, 13615, 13783, 14899
- Havana, Cuba, Latin American Solidarity Organization, conference, Senate Judiciary Committee staff study, 13872
- Haverhill, Mass., area wage survey, 15440
- Haviland, Virginia:
children's books, 1966, list, 6622
children's literature, guide to reference sources, 5085
serving those who serve children, 2532
- Hawaii:
air carrier routes, map, 4372
air transportation of all classes of mail, hearing, 9166
Alouette I observations recorded, 6736
blackbutt eucalyptus, physical and mechanical properties, 2328
census of agriculture, 1964, State and county statistics, 14839
census of manufactures, 1963, area statistics, 154
census of mineral industries, 1963, area statistics, 4284
climatological data, 3096
coast pilot, supplement, 5944
copepod crustaceans parasitic on teleost fishes, 11603
county business patterns, 171, 12046
hardwoods, multivariate equations developed for volume prediction, 8084
Hawaii Development Irradiator, dedication (remarks), 12025
housing 1965-70, forecast of requirements, 16664
lights and fog signals, list, changes, 1537, 7004, 11642, 18099
metallurgical testing of Hawaiian ferrous bauxites, report, 11374
mineral industry, minerals yearbook chapter, 2553
nautical chart catalog, 7558
Norfolk-Island-pine grown, physical and mechanical properties, 8105
nursing home care for veterans, eliminate certain requirements, report, 6007
paintability of 2 Hawaii-grown woods, 4543
pines, phenology and growth habits, 4854
plantation timber—
Hawaii Island, 4858
Kauai Island, 16665
precipitation data, hourly, 3401
Queensland maple seedlings, growth accelerated after first year, 8090
radio station NPM, antipodal region, airborne field measurements, results, 5345
rain forest, herbicides for site preparation, 4542
rainfall and streamflow from small tree-covered and fern-covered and burned watersheds, 8115
storm warning facilities charts, 11902
tide tables, high and low water predictions, 7555
tropical agriculture in economy (address), 4093
volcano observatory, summary, 3391
zooplankton, abundance and distribution, 14064
- Hawaii Volcanoes National Park, general information, 2756, 11615
- Hawaiian Islands, *see* Hawaii.
- Hawaiian Volcano Observatory, summary, 3391
- Hawkins, Gerald S., 5,000- and 10,000-year star catalogs, 8683
- Hawkins, Murphy E., salt domes in Texas, Louisiana, Mississippi, Alabama, and offshore tidelands, surveys, 2541

INDEX 1967

- Hawkins, William C., aerospace maintenance safety, 2902
- Hawley, C. C., geology and ore deposits of Lawson-Dumont-Fall River district, Clear Creek County, Colo., 16683
- Haworth, D. K., analytical investigations of laminar separations using Crocco-Lees mixing parameter method, 9806
- Hawthorne, J. R., metallurgical variables as possible factors controlling radiation sensitivity of structural steels, 5357
- Hay, Chu Chai-ho, *see* Chu Chai-Ho Hay.
- Hay, John, Camp, *see* John Hay, Camp.
- Hay:
baled, sampling tool to extract cores, 13201
feed statistics, 17333
stocks, farm and off-farm, by States, 1959-65, revised estimates, 7300
trefoll production for pasture and hay, 14741
- Hayes, Jack:
outdoors USA, yearbook of agriculture—departmental edition, 17325
document edition, 17566
- Hayes, Una, developmental approach to case-finding, with special reference to cerebral palsy, mental retardation, and mental disorders, 10403
- Haynes, William P., evaluation of battery-powered vehicles, 9770
- Hayward, J. T., roller system to facilitate covering boxcars with tarpaulins for fumigation, 13202
- Hazardous occupations, *see* Occupations.
- Hazardous substances:
child protection under Federal hazardous substances act, 12552
Federal hazardous substances act, text, as amended, 12563
harmful to health, Czechoslovakian study, 14265
labeling act, amend—
hearings, 2112
law, 466
packaging and handling for military aircraft transportation, Air Force manual, change, 13255
transportation of dangerous articles, etc., Federal aviation regulations, 10998-999
- Hazel, Joe T.:
merited grade and skill level ratings of airman jobs, 4172
merited grade versus merited pay rankings of airman jobs, 7339
policy equation to predict Criterion Board ratings, officer grade requirements project, 15891
- Hazel, Joseph E., Hemleytheridae and Trachyleberididae (Ostracoda) off north-eastern North America, 8174
- Hazen, Scott W., jr.:
analyzing mine and mineral-deposit sample and assay data, 14322
assigning area of influence for assay obtained in mine sampling, 12315
correlation between assay values and unequal sample interval values, 2571
- Head:
face protection, occupational safety aid, 9700
head-controlled TV system produces high-quality remote image, 16887
restraint for automotive vehicles, Federal standard, 6330
- Head nurses, *see* Nurses and nursing.
- Head Start Project, *see* Project Head Start.
- Headaches, hope through research, 2818
- Headley, Larry C., status of porous ionizers for contact ionization of cesium, 11540
- Headstones, *see* Tombstones.
- Heady, Earl O., food needs and U.S. agriculture in 1980, analysis of land, labor and capital requirements, etc., 17122
- Healing art:
practice act, District of Columbia, amend to exempt from licensing requirements physicians employed by District of Columbia—
law, 17560
reports, 10559, 16384
- Health:
advancement of knowledge for Nation's health, research programs of NIH, 14616
allied professions and services, education for, 14622
allied professions personnel training act of 1966, law, 463
Army examination of youths for military service, analysis of results, 8900
auxiliary training, instructor's guide, 2814
benefits program for retired members, and dependents of members of uniformed services—
law, 365
report, 664
better care for people with low incomes, new title 19, medical assistance program, brief summary, 2223
Bucharest Hygiene Institute, 40-year record, 12723
career opportunities, openings for psychiatric aid, laundry manager, etc., 15695
characteristics by geographic region, metropolitan areas, and other places of reference, 10068
children in day care, with focus on health, 7513
cigarette smoking and health characteristics, statistics, 10067
community action for health, 2167
community health planning, role of health and welfare councils, 2832
community infant formula services, minimum sanitary standards, 15695
community planning, bibliography, 16540
comprehensive health planning (paper), 10045
comprehensive health planning and public health services amendment, law, 461
Czechoslovak Ministry of Health directives on control of pharmaceuticals, 12685
emergency activities, appropriations, 1968—
hearings, 9145
reports, 10600, 15131
emergency care, family guide, reference guide for students of medical self help training course, 4378
emergency service, definition of program content for Bureau of Health Operations, 11732
environmental aspects of hospitals, infection control, 8635
environmental health series—
air pollution, 1572, 5428, 7062-63
Arctic health, 14623
radiological health, 7064-65, 8630, 10047, 11725, 15681-682, 17140
urban and industrial health, 15683-684
examination surveys of persons aged 6-17 years, study of achievement test used, 13098
facilities, District of Columbia, project grants for construction and modernization, hearing, 16405
Federal surplus personal property, how to acquire, 12621
health and obesity, source book of current information, 1585
health economics, program for research, 10050
health economics, series, 10050, 15685
health, education, and welfare indicators (periodical), 3394
health information leaflets and pamphlets, list, 18171

Health—Continued

health information series, 1574-76, 2815-21, 5433-34, 7068-69, 11780-731, 14826-628, 15686-687, 17145-148, 18165-167
 health interview survey—
 current estimates, 11763
 family characteristics and health measures reported, 7097
 health mobilization series, 1577, 2822-25, 11732-733, 13051, 15688, 18168
 health resources statistics, 10051
 home health services, planning, summary of development, following Medicare and Medicaid, 10057
 home services in your community, 11735
 homemaker-home health aide in personal care, training, 15714
 hygiene with principles of public health organization, USSR study, 1192
 Indian and Alaska native health program, nurses, examination announcement, 10436
 Indians—
 Interior Dept. policies, etc., briefing, hearings, 10655
 Public Health Service program—
 nurses, examination announcement, discontinuance, 10423
 report to the 1st Americans, 11761
 role of dentist, 8627
 industrial, publications, price list, 17135
 information and policies on grants—
 for comprehensive areawide health planning, 17156
 to States for—
 comprehensive health planning, 15702
 public health services, 13086
 insurance, social security rulings, 2872
 late somatic effects of radiation of body in man, 10308
 library services of National Clearinghouse for Smoking and Health, 11749
 livable environment, strategy for, 12622
 MDTA and your health manpower needs, 15434
 medical training in Veterans Administration, major contribution to Nation's resources, 8782
 National Interagency Conference on Smoking and Health highlights, 7077
 neighborhood centers, general information, questions and answers, 7877
 new programs for persons and families of low and moderate income, 8193
 opportunities for health science libraries, 8941
 partnership for health, 13086, 15702, 17156
 partnership for health amendments of 1967—
 hearings, 12305, 17670
 reports, 16230, 16247
 partnership for planning, extension of remarks, etc., 7080
 poisons and other harmful substances, Czechoslovakian study, 14265
 Polish National Republic public health organization problems, 15425
 portraits in community health (series), 5456, 13089
 positive approaches (address), 1893
 professions—
 allied educational improvement grants, 2507
 education, publications, bibliography, 5459
 scholarship program, 13082
 student loan program, 5435, 17149
 programs, proposals, message from the President, 7602
 protection, target of Bureau of Disease Prevention and Environmental Control, 11734, 17150

Health—Continued

public—
 code of Federal regulations, 7989
 computers, electrocardiography, report of recent studies, 11723
 conference on records and statistics, proceedings, 11th national meeting, 18185
 engineering abstracts, 3781
 grant programs in dental research, research training, fellowships, 8632
 laws, amend—
 hearings, 9163
 law, 12173
 reports, 9136, 10599, 12366
 laws, compilation, 4547
 personnel in local health units, PHS analysis of information, 10059
 public health bibliography series, 1589-90, 7083, 8642-43, 11753-754, 13090, 15705
 public health monograph series, 7084
 public health reports, 3782
 residency training in preventive medicine and dental public health, 7090
 space flight feeding systems, public health implications, 15808
 State salary ranges, 4598, 11194
 traineeships for professional personnel, 15713
 USSR—
 greater economy urged, 6570
 medical men and economists discuss economics of, 2462
 problems in next 5-year plan, 4966
 public health service, defects cited, 1263
 Soviet public health (USSR periodical), translations, 3889
 Public Health Service grants, etc.—
 funds, 1966—
 construction of research facilities, 11755
 formula, project grants and regional medical planning grants, etc., 8644
 research, 7085
 summary tables and graphic highlights, 15706
 training projects, policy statement, 13091
 Washington State, financial administration, GAO review, 14160
 radiological data and reports (periodical), 3805
 radiological health research, July 1965-Dec. 1966, summary report, 13092
 radiological health technician training, programs, 13093
 radiological health training courses, 13085
 recent translations, selected list, 3809
 reference facts, 16706
 research facilities construction program, Surgeon General's report, 524, 12207
 research grants by NIH, administration, report, 15755
 research highlights, NIH work, 10061
 Rumania—
 children's health protection problems in Socialist Republic, 15361
 prophylaxis in health protection, 1160
 situation, 1240
 safety of large volume parenteral solutions, national symposium proceedings, 15275
 securing, in our urban future, 7091
 service personnel, education—
 clarify responsibility of VA, law, 489
 lack of implementation by VA, hearings, 16844
 services—
 and surveys, research relating to children, 8967
 coordinated funding, in projects receiving or eligible for assistance under programs of HEW and OEO, 13938
 costs and delivery to older Americans, hearings, 17633

INDEX 1967

Health—Continued

services—continued
 elderly people, Dexter Manor story, 5456
 Memphis-Sheiby County, Tenn., civil rights report, 14851
 project grants manual, changes, 10052
 Project Head Start, guide for directors and health personnel, 12450
 ship repairing regulations, 9728
 shipbreaking regulations, 9729
 shipbuilding regulations, 9730
 smoking and health—
 bibliography, 15705
 directory of on-going research, 11743
 smoking, health consequences, Public Health Service review, 17144
 statistics—
 analytical studies, 5466, 7097, 8659, 17167
 data evaluation and methods research, 2842, 7096, 8657-58, 11762, 13098
 data from national health survey, 7098, 8660-61, 10067-69, 11763-764, 13099, 14637-639, 18168-170, 18188-189
 data from National Vital Statistics System, 5471, 8662, 15715, 17171-172
 travel information—
 Asia, etc., Australia and New Zealand, 13078
 Europe, 13079
 Mexico, Central and South America, and Caribbean, 13080
 voluntary health and welfare agencies, fundraising within Federal service, manual, 3539, 4399
 workers in Peace Corps, 5377
see also Medical care—Mental health.
 Health Agencies, State, Advisory Committee on HEW Relationships with, *see* Advisory Committee on HEW Relationships with State Health Agencies.
 Health and Safety Laboratory:
 AEC fallout program, quarterly summary reports, 1785-86, 5774-75, 10299-300, 13324-325
 AEC, standard procedures manual, 1795, 13336
 Health boards and departments:
 directory—
 local units, 1569
 State and territorial health authorities, 15680
 nursing expenditures in small health agencies, costing procedures, 5437
 Health centers:
 health services research centers, purposes & organization, 17151
 home health agencies, providers of services under health insurance for the aged, directory, 11793
 neighborhood, demonstration program, general information, 9383
 Health Council, National Advisory, *see* National Advisory Health Council.
 Health Department, D.C., employees, remaining on duty during inaugural period, provide meals, report, 7686
 Health, Education, and Welfare Department:
 activities in family planning, fertility, sterility, and population dynamics, 1136
 annual report, 8190
 appropriations, 1967, law, 491
 appropriations, 1968—
 amendments, 10517
 hearings, 7734, 10631, 13841
 reports, 10560, 10612, 12252, 15082, 16287
 career opportunities, auditing, 8195
 field directory, 12619
 health services, coordinated funding, in projects receiving or eligible for assistance under programs of HEW and OEO, 13938
 mental retardation activities, 6414
 mental retardation publications, 4896
 press releases, 3734

Health, Education, and Welfare Department—Continued
 relationships with State health agencies, advisory committee report, 6413
 reorganization, hearings, 956, 2121, 4642, 6112
 index, 16416
 research grants, etc., establishing indirect cost rates, guide for—
 educational institutions, 8189
 hospitals, 12620
 strengthening community services in low-income neighborhoods, concerted services with HUD, task force report, 17840
 Surplus Property Utilization Office, regional representatives, directory, 8188
 Health, education, and welfare indicators, 3394
 Health, Education, and Welfare Services and Housing Joint Task Force, report, 17840
 Health Insurance:
 aged persons—
 extend deadline for enrollment—
 law, 16142
 report, 16264
 extended care facility, manual, 5504, 7120
 home health agency manual, revision, 8687, 18206
 social security amendments of 1967—
 hearings, 15154, 16409
 reports, 14953, 14964
 summary, 15053
 social security handbook, 1606
see also below, medicare.
 Blue Cross and Blue Shield plans, 1965, enrollment and finances, 1607
 credit, for student loans, increase maximum amount allowable in D.C., report, 882
 disabled persons, provide, hearings, 7763, 10684
 drug prescription programs, digest, 8628
 enrollment under social security, July 1, 1966, number of persons by State and county, 10083
 Federal employees—
 and retired Federal employees health benefits, annual report, 7540
 Federal personnel manual, supplement, 3303
 health benefits act, text, 4654
 health insurance for the aged, HIM (series), 5502-4, 7119-20, 8687, 10084, 18206
 health insurance statistics, current medicare survey report (series), 17197
 household workers and their employers, statistics, 2871
 independent plans, 2870, 17201
 medicare—
 conditions for coverage of services of independent laboratories, 5502
 facts, 18209
 home health benefits, payments to agency, 7128
 hospital manual, 10084
 how it helps when entering hospital, 5513
 initial operating data, 5515
 medical insurance claims, methods of payment, 7127
 people 65 or over, 5511
 provider costs, reimbursement, principles, 5503
 services by hospital-based physicians, reimbursement, 7119
 social security benefits for people 65 and over, information, 10085
 negotiated health and insurance plans, 1962-66, changes, 2521
 plans under collective bargaining, digest, 5058
 social security rulings, 3881

Health Insurance—Continued
see also Old-age, survivors, disability, and health insurance.

Health officers:

local, statistics and characteristics, 10053

Soviet officials in USSR, 1247

Health Operations Bureau, emergency health service, program content, definition, 11732

Health physics, *see* Physics.

Health Physics Society, Journal, KWIC index, 15694

Health records, *see* Medical records.

Health resorts, Polish, treatment of diabetes, 17865

Health service workers, health service industry, technology and manpower, 1965-75, report, 11297

Health Statistics, National Center, *see* National Center for Health Statistics.

Hearing:

and speech disorders, causes, etc., 18178

characteristics of persons with impaired hearing, 8660

flying personnel, survey, 17356

hearing levels of adults by race, region, etc., U.S., 17163

signal presentation rate, auditory threshold, and group vigilance, 11349

Hearing examiners, examination announcement, 12114, 16066

Hearings:

adjudication cases before Government agencies, modified procedure, hearings, 13871

congressional committees, index, 13472

Federal Reserve System Board of Governors rules of practice, 15250

Hearn, George H.:

remarks—

Feb. 1, 1967, 6258

Feb. 24, 1967, 6260

Mar. 31, 1967, 7970

May 20, 1967, 11016

Hearn, Jackson B., foreign trade regulations of Turkey, 12136

Heart:

artificial parts, fact sheet, 11729

atrial systole effect on right ventricular stroke output in man, 11956

coronary circulation, normal and pathologic, 11999

heart research news (periodical), 3395

miniature swine, cardiac output, etc., 4186

multifocal premature contractions, ECG finding of grave significance, 15897

rate response of anesthetized and unanesthetized dogs to noise and near-vacuum decompression, 4180

resting man during early exposure to high altitude, cardiopulmonary responses, 7413

Heart diseases:

aortic insufficiency in flying personnel, 17348

characteristics of clients rehabilitated, 7221

congenital, review of research grants supported by National Heart Institute, 15677

Coronary Drug Project, 15678

electron-histochemical investigations of experimental myocardial ischemia, USSR study, 14219

hypertension and heart disease, views, 8658

National Congestive Heart Failure Seminar, report and recommendations, 8646

nursing in coronary care units, publications, films, and other teaching aids, 5452, 11754

regional medical programs, guidelines, 13076

Heartwood:

differences between heartwood and sapwood, 2302

Heartwood—Continued

native species, comparative decay resistance, 8065

Heat:

capacity measurements, phase composition of frozen montmorillonite-water mixtures, 14792

content of blast-furnace and synthetic slags, 6675

cryogenic seal remains leaktight during thermal displacement, 12837

dispersion of borax in plastic, excellent fire-retardant heat insulator, 8384

high intensity radiation source capable of sustained operation, 5215

input rates effects on T-1 and T-1A steel welds, 12894

losses, sensible and latent, from occupants of survival shelters, 7092

shells of revolution possessing variable thickness heat protection, stiffness matrix solution, 11514

stability of egg white proteins under minimal conditions that kill salmonellae, 11918

thermal characteristics of storage vessel on moon, 6259

waste, use for production of fresh water, 6450

see also Heat transfer—Temperature.

Heat (specific), *see* Specific heat.

Heat capacity, freezing point depression and heat capacity of soils, thermodynamic relationships, 8878

Heat exchange, *see* Heat transfer.

Heat exchangers:

coldplate of pin fin design makes efficient one, 9839

corrosion in hot sea water in experimental loop apparatus, investigation, 15326

design parameters and cost, evaluation, computer usage, 14324

industrial plant equipment handbook, 977

liquid metal, thermal conductivity of layer adjacent to wall, USSR study, 11249

tubes supported in high vibration environment, 5220

vertical-upflow single-tube, pressure drop and heat transfer for water boiling, 14463

Heat flux, *see* Heat transfer.

Heat of activation, tungsten resonance absorption integrals, determination, 18012

Heat of combustion, methane gas, calculation of heating value for use as reference material, 2743

Heat of formation:

lithium sulfate and 5 potassium- and lithium-aluminum silicates, 2577

yttrium and thallium trichlorides, 6683

Heat shields:

ablative materials for X-15-2, arc-tunnel evaluation, 5238

ceramic, for lifting reentry vehicles, study, 15509

Heat sink, repairable, high-density microelectronic module, 17967

Heat transfer:

axisymmetric solutions, solidification in thermal-energy storage systems, analysis, 5246

boiling, in zero-gravity environment, 5164

boiling, with electrical field, 13334

characteristics for dilute gas-solids mixture in externally heated tube, numerical method for determining, 14326

characteristics of axial-flow liquid-core nuclear rocket, 14497

charts adapted from Spalding and Chi method, 11518

classification definitions, heat exchange, 18127

coefficients and static pressures for condensation of high-velocity steam within tube, 9911

INDEX 1967

Heat transfer—Continued

coefficients, in convergence nozzles with uncooled pipe inlets, 17005
 computer program resolves radiative, conductive, and convective problems for variety of geometries, 17959
 conduction in moist porous media, 10256
 conical porous membrane during planetary entry, 11554
 convection, conduction, and evaporation in nucleate boiling, assessment, 9907
 convection, ice melting, 7378, 17376
 convectively cooled nuclear rocket type nozzle, design and evaluation, digital codes, application, 5269
 cryogenic hydrogen flowing turbulently in straight and curved tubes at high heat fluxes, 6713
 cylindrical leading edge, effects of shock wave impingement, 6896
 Dowtherm A, tests, final report, 5762
 factors influencing heat transfer to liquid-propellant rocket-thrust-chamber coolant channels, 1484
 film-boiling heat transfer from flat plate effect on subcooling and radiation, 14453
 forced-convection, correlations for gases flowing through wire matrices at surface temperatures to 5500° K, 9913
 formation of non-wettable soils involves heat transfer mechanism, 11124
 fuel temperatures in gaseous nuclear rocket engine, local and average estimates, 16998
 heat and mass transfer at stagnation point, 12869
 heat flux sensor design reduces extraneous source effects, 2656
 high-performance once-through boiling of potassium in single tubes at saturation temperatures of 1500° to 1750° F, 15504
 horizontal spray film evaporator, coefficients, 6440
 liquid-liquid, evaluation for large-scale desalination, 14200
 liquid-metal flow in rectangular channels with heat sources in fluid, 6883
 local, and pressure distributions for freon-113 condensing in downward flow in vertical tube, 11510
 long duration heat flux transducers, theory, etc., 6777
 man in oxygen-helium environment, heat exchange, 81
 manned orbiting space station, thermal control considerations, 11538
 measurements on flat plate with attached protuberances in turbulent boundary layer, 6282
 measurements on rotor blade of rotor entry vehicle model, 12965
 nonwetting, condensing mercury flow in horizontal, sodium-potassium-cooled tubes, experimental investigation, 11541
 one-dimensional heat conduction problems, computational procedure for finite difference solution reduces computer time, 2675
 potassium performance during condensation inside single tubes, 15506
 power required to circulate gas-solids suspensions, 15483
 pressure drop and heat transfer for water boiling in single-tube heat exchanger, 14463
 properties of copper braze bonds, correlation with ultrasonic transmission properties, 8389
 radiant, in fuel region of gaseous nuclear rocket engine, 5183
 radiant, liquid core nuclear rocket engine, potential performance, 18016
 radiative, for large objects at meteoric speeds, analysis, 12958

Heat transfer—Continued

rate, and orifice size, effect on measured static pressures in low-density arc-heated wind tunnel, 6876
 regeneratively cooled hydrogen-fluorine rocket engine at low chamber pressure, 17006
 roughness effect to hemisphere cylinders at Mach numbers 10.4 and 11.4, 8492
 supersonic aerodynamics, effects, handbook, 1542
 tension shell configurations, investigation, 5270
 thermal conductivity—
 cermet fuel materials, estimating for nuclear reactor application, 8502
 coefficients of dilute neon, krypton, and xenon, 11589
 coefficients of dilute nitrogen and oxygen, 5293
 liquid-metal heat exchanger layer adjacent to wall, USSR study, 11249
 ordinary and deuterated gaseous hydrogen fluoride and their equimolar mixture, 12961
 phenolic-carbon composite, nondegraded and thermally degraded, 16917
 probe for glaciers, 17377
 probes for soils and insulations, 4201
 selected materials, 1523
 wood-base fiber and particle panel materials, 14124
 tubes, capability increased by selective roughening, 6773
 turbulent boundary layer investigation with transfer at high Reynolds numbers, 8488
 turbulent, correlation of free-flight data from axisymmetric bodies with compressible flat-plate relationships, 5272
 turbulent liquid-metal, in channels with heat sources in fluid, theoretical investigation, 1499
 weak locally homogeneous turbulence and heat transfer with uniform normal strain, 5254
 Heat treatment:
 aluminum casting alloy M45, study, 12892
 iron and steel, 2739
 metal parts facilitated by sand embedment, 6779
 stabilizes welded aluminum jigs and tool structures, 2625
 tensile yield strength using least number of specimens, simplified method measures changes, 16879
 Heaters:
 control circuit provides both fast and proportional control, 11445
 space, Federal item identification guide, 15184
 see also Furnaces—Unit heaters.
 Heath, Larman J., recovery of additional oil from water-drive reservoirs, 2574
 Heating:
 induction, of cold plasma and DC plasma enhancement, use in production of superheated hydrogen plasma, 5166
 induction, radio frequency, of low-pressure plasmas, 18035
 rate and surface pressure for flat plate impinged upon by exhaust plume in near perfect vacuum, 6795
 rates, numerical method for determining from thick-calorimeter data, 8486
 resistance, releases structural adhesive, 8469A
 system for homes, description, etc., 15874
 thermal absorption in seeded gases, 12866
 see also Aerodynamic heating—Arc heating.
 Heating apparatus and supplies:
 current industrial reports, 3169, 5863
 equipment, Federal item identification guides for supply cataloging, supplements, 3288

Heating apparatus and supplies—Continued
Federal Republic of Germany, market for
residential heating equipment, 5953
industrial heating equipment industry,
survey, 10330
see also Heaters.

Heating elements, *see* Electric heating elements.

Heaton, Leonard D., neuropsychiatry in
World War II, 13311

Heavy water:

France, production, study, 1196
heavy water organic cooled reactor, thor-
ium fuels, evaluation, 5704
industrial manufacture, East German
study, 15378

intensity measurements of absorption
bands, 1550

measurement of trace levels of deuterium
oxide in biologic fluids using infrared
spectrophotometry, 11904

quantitation of trace levels of deuterium
oxide using infrared spectrophotometry,
10236

Hedden, O. K., equipment for applying soil
pesticides, 14735

Hedges, Janice N., address, Nov. 19, 1966,
8706

Hedman, E. R.:

elimination of stratification at Lake Ca-
chuma, Calif., 11183

floods of Nov. and Dec. 1965 in southern
California, 1115

Hee, Olman, demand and price analysis for
potatoes, 13252

Hee Shun Moon, *see* Chun Moon Hee (H1).

Hee Lee Duk, *see* Lee Duk Hee.

Heebink, B. G., measuring surface irregu-
larities in panel products, 11113

Heemstra, Haymond J., application of im-
proved continuous electrophoresis appar-
atus to study of petroleum, 9764

Hegg, Karl M., photo identification guide for
land and forest types of Interior Alaska,
15287

Heidelbaugh, Norman D.:

man during 56-day exposure to oxygen-
helium atmosphere, feeding bite-size
foods, 82

space flight feeding systems, character-
istics, etc., 15898

Heldmann, L. J., herbicides for preparing
ponderosa pine planting sites in South-
west, 14110

Heldmann, Marcus F.:

chugging instability with liquid-oxygen
and gaseous-hydrogen combustors, 11547

frequency response characteristics of prop-
ellant vaporization, 5235

Helen, Bobette P., basic data on economy
of Iceland, 9016

Hellbroner, Robert L., automation in per-
spective of long-term technological change,
2487

Helmann, Rene H., relief, 12222, 13779,
14895

Heimel, Sheldon, thermodynamic properties
of potassium to 2100°K, 16999

Heinrich, Kurt F. J.:

scanning electron probe analysis, 5288

X-ray wavelength conversion tables and
graphs for qualitative electron probe
microanalysis, 17039

Heinrich, P. L., dielectric infrared beam-
splitter operating in 5 to 30 micron region,
6721

Helsing, Leonard F.:

Lake Superior iron resources, etc., 6678,
14346

mineral industry of Minnesota, 2557

Heltz, Glenn E., how cooperatives grow,
12484

Helfman, Robert S., MAP read-routine for
IBM 7094 Fortran II binary tapes, 4845

Helicopters:

Army model CH-34, depot maintenance
manual, 7401

calculation and design, 17017

certification and operations of scheduled
air carriers with helicopters, Federal
aviation regulations, 6240, 12497

close-order formation keeping system, final
report, 5771

cross-pointer-type instrument display in
landing, 1488

DYNAGYRO, mechanical stability aug-
mentation system, 13307

heavy lift, hot cycle rotor system, prelim-
inary design, 10288

heavy-lift, shaft-driven rotor system
parametric analysis and preliminary
design, 116

helicopterborne operations, Marine Corps
manual, 15460

hingeless rotor system, structural loads
encountered, exploratory flight inves-
tigation and analysis, 1487

light observation and large load-lifting
military, operational experiences, 16983

light observation, Army procurement,
review—

hearings, 12289

subcommittee report, 13699

measurement of low frequency vibrations
and their transmission to pilot, 11564

moving-map instrument display in land-
ing approaches, evaluation, 11531

night flying over mountains, guidance
systems tested, 8089

Princeton dynamic model track, general
description, 7409

radial-flow turbines, friction and leakage
losses in blade-rings, 5277

rotor air loads, blade motion and stress
caused by transient inputs of shaft
torque as related to stoppable rotor
operation, 13308

rotor blades, comparison of flight-meas-
ured chordwise distributions with static
2-dimensional airfoil characteristics,
11502

rotor noise reduction, tip vortex core
thickening, application, 4220

sampling tree tops by helicopter, 11123

tandem-rotor, aerodynamic loads and dy-
namic response of rotor blades, predict-
ing, 13310

transmissions, using solid lubricants, in-
vestigation, 8897

UH-1, laminated elastomeric bearings in
tail rotor, evaluation, 17389

UH-1B, fluid state hydraulic damper,
10286

use for herbicide control of shrub live oak
and birchleaf mountainmahogany, 14111

XV-9A, hot cycle research aircraft, flight
test program, 7410

Helotechnology (USSR periodical):

translations, 3396

Helports:

Army airfield-heliport design, general pro-
visions and criteria, technical manual,
change, 10274

District of Columbia, lease property—
hearing, 960

law, 12160

reports, 627, 931

emergency construction, technical
manuals—

drainage and erosion control structures,
110

drainage, surface, design, arctic and
subarctic, 7395

drainage, surface facilities, 4214

flexible pavement, evaluation, 4216

pavement evaluation concepts, 7392

rigid pavement, evaluation, 7393

Heliport standard marking pattern, de-
velopment study, 17734

INDEX 1967

Helium:

- combustibility of materials in oxygen-helium and oxygen-nitrogen atmospheres, 5706
- effect of substitution of helium for nitrogen in mixtures with oxygen on flammability of materials in hyperbaric atmospheres, 11675
- effects as pressurants in nitrogen tetroxide transfer, 9847
- equation of state for helium-nitrogen mixtures, 8374
- genesis, rel. to isotopic abundance of neon, etc., in natural gases, 9785
- helium-neon laser discharge parameter study, 17086
- helium pressurant requirements for liquid-hydrogen expulsion using submerged gas injection, 14492
- leakage tracer, use facilitated by pipe weld testing fixture, 12904
- liquid, simple pump maintains level in cryostat, 8465
- liquid, transfer, resistor monitors, 6750
- liquefied, storage and transport, USSR study, 15403
- man in oxygen-helium atmosphere—
 - behavior factors, 86
 - clinical observations, 90
 - enteric microbial flora, 79
 - excretion of steroids and catecholamines, 7366
 - exercise and cardiovascular response, 88
 - 56-day exposure study, 82, 92
 - heat exchange, 81
 - introduction and general experimental design, 91
 - major and minor atmospheric components, 89
 - nutritional evaluation of feeding bite-size foods, 83
 - observations, 80
 - oral, cutaneous and aerosol bacteriologic evaluation, 84
 - renal response, 87
 - selected blood enzyme response, 85
 - portable detector set discloses helium leak rates, 9833
 - thermodynamic properties of van der Waals fluid in 2-phase region, 11379
 - two-constant equation from 30° to 1,473° K, 14357
 - volume ion production costs in tenuous plasmas, detailed results, 15577
- Helium isotopes, helium-3, use for control of nuclear reactor with gaseous control system, 14485
- Heller, Christine A., Alaska dietary survey, 14623
- Helmer, William H., prediction of reenlistment, 118
- Helmets:
 - system broadcasts electroencephalograms of wearer, 2660
 - welders, military standard, 9372
- Helminths, antigen structure, use of immunoelectrophoresis for study, USSR, 12664
- Helwig, Cecelia, salad dressing, mayonnaise and related products, 12028
- Hem, John D.:
 - composition of saline residues on leaves and stems of saltcedar (*Tamarix pentandra* Pallas), 6397
 - form and stability of aluminum hydroxide complexes in dilute solution, 15313
- Hemagglutination, indirect, test for *Mycoplasma pneumoniae* employing commercially available antigen and adapted to microtiter technic, 5754
- Hematite:
 - Clinton sandstone deposits, Butt Mountain area, Va., 12819
 - ores of Marquette Range, Mich., flotation procedures, laboratory, etc., development, 14335

- Hematocrit, mean blood hematocrit of adults, 10069
- Hematology, *see* Blood—
 - Immunohematology.
- Hematoma, pressure, relieved with handheld instrument, 16963
- Hembre, Noble S., civilian manpower management, Journal of Navy civilian personnel management, 8602
- Hemicytheridae, *see* Crustaceans.
- Hemiptera in National Museum, notes, 5307 *see also* Hesperolabops.
- HemisFair 1968:
 - symbol of growing unity of the Americas (remarks), 7581
 - U.S. participation, amend act—
 - law, 399
 - report, 621
- Hemisphere, Eastern, foreign air carriers, routes authorized under permit, map, 4373
- Hemisphere, Northern:
 - climatology, introduction, 14793
 - components of 1000-mb. winds, 6991
 - daily synoptic weather maps, 3181
 - meteorological body of data, derivation, 8417
 - selected level temperatures and dew points, 6392
- Hemisphere, Western:
 - agricultural policies, 17714
 - agricultural situation, review and outlook, 990, 10925, 16493
 - Balclutha (Homoptera: Cicadellidae), classification, 8547
 - foreign air carriers, routes to U.S. authorized under permit, map, 4374
 - trade corporation income tax returns, data, 11224
 - Western Hemisphere supply and demand study (series), 12456
- Hemisquilla ensigera, *see* Crustaceans.
- Hemlock:
 - forest floors and soils under true fir-hemlock stands, characteristics, 11139
 - scale insect, *Florinia externa*, description, control, etc., 17796
 - western—
 - field testing of *Bacillus thuringiensis* for control of loopers, 14140
 - labor requirements in thinning, 4837
- Hemlock borers, description, control, etc., 16647
- Hemodynamics, *see* Blood.
- Hemoglobin:
 - body total, measurement by bloodless technics, 10232
 - pathochemistry, USSR study, 14215
- Hemolysis and hemolysins:
 - effect of hypobaric and hyperbaric pressure on cell permeability, initial observations, 7356
 - hemolytic and lecithinase activity, clostridium bacteria toxins effect, 15388
- Hemophilia, anticoagulant effect of hemophilic blood, clotting prolonged in canine transmitter, 10244
- Hemorrhage, tissue oxygenation during shock, 15895
- Hemostasis and coagulation, theoretical concepts, 7340
- Hempstead Harbor:
 - channel improvement, engineer report—
 - departmental edition, 9419
 - document edition, 9073
- Hendee, John C., slash decomposition, laboratory tests fail to confirm acceleration by chemical treatment, 8086
- Henderson, Douglas B., nomination, hearings, 6094
- Henderson, Harry W., terms used in international agricultural trade, 9524
- Henderson, William P., rolling stability derivatives of variable-sweep tactical fighter model, 6887

- Henderson County, Ky., soil survey report, 8698
- Hendricks, Lewis T., distribution methods and end-uses for hardwood face veneer and plywood manufactured in Michigan and Wisconsin, 8074
- Hendrickson, Nora A., relief, 7628
- Hendrix, A. T., modulating valve for programmed temperature, 2
- Henley, John W., electronic computer program for calculating saw log lumber recovery and value, 14080
- Henry, B. W., variation in brown-spot infection of longleaf pine from several geographic sources, 14118
- Henry, Colvern D., relief, 856
- Henry, Jack L., phase relations in uranium monocarbide region of system uranium-carbon-oxygen, 12821
- Henry Bolz Dam and Reservoir, designate, report, 2100
- Hens, see Poultry.
- Hepatoma, see Tumors.
- Herald of communications (USSR periodical), 3397
- Herbage-timber, differences in relationships between thinned and unthinned ponderosa pine stands, 2316
- Herbarium, see National Herbarium.
- Herbert, Edward L., starch and related products in selected countries, 15986
- Herbicides :
 fail to insure success of brushfield prescribed burn, 6366
 for forest plantations, 12571
 for preparing ponderosa pine planting sites in Southwest, 14110
 helicopter-applied, control shrub live oak and birchleaf mountain mahogany, 14111
 injection for controlling cull ohia trees, 8088
 killing weeds, student or classroom science project, 4137
 lawn weed control, 15854
 picloram for killing chaparral species, preliminary rating, 8085
 site preparation, broadcast spray by mist blower tested against understory in Hawaii rain forest, 4842
 weed control in 2-year old walnut planting, 14098
 see also Phenoxxy herbicides.
- Heredity, hexaploid sweetpotatoes, theoretical segregation ratios of qualitatively inherited characters, 5688
- Heritage to discover, 2184
- Hermetia, species of *Hermetia* of aurata Group, 11609
- Hermetically sealed cells protected from internal gas pressure, 6846
- Hermesmeyer, Lee F., land forming, means of controlling surface water on level fields, 5642
- Hernandez, Fernando O. Garcia, see Garcia-Hernandez, Fernando O.
- Hernandez, Guillermo N., Jr., relief, 9217, 13493, 13598
- Hernandez, Hector J. Sanchez, see Sanchez-Hernandez, Hector J.
- Hernandez, Julio D., relief, 10716, 16204, 17509
- Hernandez, Luis Crespo, see Crespo, Luis.
- Hernandez, Ramon Baez, see Baez Hernandez, Ramon.
- Herr, Robert W., dynamic model investigation of touchdown stability of lunar-landing vehicles, 18042
- Herrick, Owen W. :
 cost analysis of chip manufacturer at hardwood sawmills, 14139
 Kentucky's lumber industry, 11136
- Herrington, Roscoe B. :
 aerial photo techniques for recreation inventory of mountain lakes and streams, 14128
- Herrington, Roscoe B.—Continued
 skilling trends and opportunities in Western States, 11133
 technique for sampling general fish habitat characteristics of streams, 17806
- Hersch, Martin, gaseous-hydrogen-liquid-oxygen rocket combustion at supercritical chamber pressures, 17001
- Hersh, A. S., drag coefficients of microscopic spheres in free-molecule flow, 11407
- Herter, Christian A. :
 memorial services, 16152
 print as House document, report, 12242
- Hervey, John G., Federal textbook on citizenship, our Constitution and Government, 12632
- Herzog, R.F.K., mass spectrometer analysis of solid materials with ion-microprobe sputter source, 5178
- Hesperolabops, cactus plant bug genus, 14539
- Heterocyclic compounds, distillable, identification from coal tar, 12795
- Heterodyne operations of avalanche photodiodes, 18023
- Heterodyne phase shifter with inductive delay line, etc., 16977
- Heteroptera in National Museum, notes, 5307
- HEW, see Health, Education, and Welfare Department.
- Hewes, Donald E., analysis of self-locomotive performance of lunar explorers based on experimental reduced-gravity studies, 11501
- Hewitt, Francis S., Committee on Appropriations, Senate, 100th anniversary, 9183
- Heyl, Allen V., aeromagnetic and tectonic analysis of upper Mississippi Valley zinc-lead district, 4888
- Heyson, Harry H. :
 equations for application of wind-tunnel wall corrections to pitching moments caused by tail of aircraft model, 2715
 tables of interference factors for use in correcting data from VTOL models in wind tunnels with 7 by 10 proportions, 9825
- HIFIR (high flux isotope reactor), see Reactors (atomic).
- HHFA, see Housing and Home Finance Agency.
- Hi Chun Moon, see Chun Moon Hee (Hi).
- Hi, I'm Mr. Money Wise, 14649
- Hibbing, Minn., nonmagnetic taconite occurrences in area, reexamination, 14346
- Hickerson, Harold, land tenure of Rainy Lake Chippewa at beginning of 19th century, 6974
- Hickman, Robert C., Chattanooga shale investigations, 9783
- Hickory, redcedar mixtures established in poor oak-hickory forests, 8073
- Hicks, J. R. :
 fog dispersal experiments using propane at Walla Walla, Wash., 11984
 improving visibility during periods of supercooled fog, 7381
- Hicks, Raymond M., some effects of Mach number and geometry on sonic boom, 18041
- Hides and skins, see Leather, hides, and skins.
- Hiers, Robert S., effects of shock wave impingement on heat transfer on cylindrical leading edge, 6896
- Higgins, Ralph V. :
 computer techniques for predicting 3-phase flow in 5-spot waterfloods, 15477
 unique properties of permeability curves of concern to reservoir engineers, 14360
- High energy physics, see Atomic energy.
- High Plains, see Southwest (U.S.).
- High Rock Nature Conservation Center, New York City's educational workshop for children, 13959

INDEX 1967

High schools:
aid to strengthen and improve educational quality and opportunities, administrative programs, notes and working papers, 10865-867
biology, radiol isotopes experiments, bibliography, 5797
football contests, protect from professional contests—
hearings, 742
law, 504
law, legislative history, 2064
law, summary, 4596
Senate amendments, summary, 4568
Gallaudet College, model secondary school for deaf to serve National Capital region, establishment, etc.—
law, 408
law, legislative summary, 8192
graduates, Presidential scholars, 4717
high school and cultural illiterate, 7899
model spacecraft construction units for secondary school industrial arts, 2594
public secondary day schools, pupils, teachers, etc., fall 1966, statistics, 7896
see also Secondary education—Students.
High Speed Ground Transportation Panel, *see* Panel on High Speed Ground Transportation.
High-temperature materials, *see* Refractory materials.
Higher education, *see* Colleges and universities.
Highland, J. D., soil survey of Iowa County, Iowa, 14657
Highway engineers:
Public Roads Bureau—
professional engineer, opportunities, 18192
training program, opportunities for young engineers, 1593, 18192
Highway machinery, *see* Road machinery.
Highway planning notes, 13100
Highway safety, *see* Safety of life.
Highways, *see* Roads and highways.
Hiking, *see* Walking.
Hill, Chester A., relief, 344, 543
Hill, Edward E.:
preliminary inventory of records of—
Indian Affairs Bureau, 14506
National Park Service, 14509
Hill, T. E. Jr., processing of high-iron Arkansas bauxite ores, 9768
Hill, Thelma P., chemical composition of sedimentary rocks in Colorado, etc., 14172
Hill-Burton program:
hospital and medical facilities series under Hill-Burton program, 1579, 7071, 8634-35, 11738, 15690-692
progress report, 7070
publications, bibliography, 5459
Hill-Burton project register, 3398, 8633, 13169
Hilliard, Jack B., annotated bibliography of Marine Corps in First World War, 14310
Hillje, Ernest R., entry flight aerodynamics from Apollo mission AS-202, 17009
Hillman, Louise H.:
basic data on economy—
Malaysia, 1945
Singapore, 7575
Hilo, Hawaii:
harbor, tsunami barrier stability—
navigation opening structures, 2220
rubble-mound, 16526
Hilton, David A., sonic-boom measurements during bomber training operations in Chicago area, 1481
Hilton, Inge H., relief, 10552
HIM series, 5502-4, 7719-20, 8687, 10084, 18206
Hindelang, Franz J., coupled vibration and dissociation relaxation behind strong shock waves, 6908

Hinds, Thomas E., indicators and associated decay of Engelmann spruce in Colorado, 6371
Hiner, Richard L., slaughtering, cutting, and processing beef on farm, 4106
Hing Hom Mon, *see* Hom Sheck See, and wife.
Hinges:
adjustable, permits movement of knee in plaster cast, 9829
safety door, for automotive vehicles, Federal standard, 6319
Hinkle, Melvin E., mineral industry of Maryland, 5116
Hinsch, Robert T., new overwrapped trays for McIntosh apples, 1674
Hinschaw, L. B., problems in aerial application: I-V, 17410
Hinson, William F., effects of jet pluming on static stability of rocket models, 14467
Hipparchus, AIC 77B, lunar chart, 7330
Hippchen, Leonard J., personnel and personnel practices in public institutions for delinquent children, 4367
Hipskind, Roger P., Brazilian income tax legislation, 12133
Hiranaka, Setsuko, *see* Wilson, Setsuko.
Hired farm workers, *see* Farm labor.
Hirschmann, E.:
development of 10.6-micron, laser modulator, 12957
electro-optic and magneto-optic modulators, 11487
electro-optic light modulators, 1489
Hirshhorn, Joseph H., Museum and Sculpture Garden, *see* Joseph H. Hirshhorn Museum and Sculpture Garden.
Hirst, Stephen M., basic data on economy of Soviet Zone of Germany, 5956
Hispanic Foundation, bibliographical series, 12779
Histochemistry:
electron-histochemical investigation of experimental myocardial ischemia, USSR study, 14210
histochemical methods in electron microscopy, USSR study, 12661
Well stain on liver, aerial application, problems, 10320
Histopathology laboratory procedures of Pathologic Anatomy Branch of National Cancer Institute, 15689
Historians, examination announcement amendment, 10414
Historic American Buildings Survey, selections, 11616
Historic Preservation in United States, National Trust for, *see* National Trust for Historic Preservation in United States.
Historic sites:
heritage to discover, 2184
landmarks, in District of Columbia, registration, report, 14999
national survey of sites and buildings, prospector, cowhand, and sodbuster, historic places associated with mining, etc., in trans-Mississippi West, 13008
preservation, as part of urban renewal, law, 465
preservation program—
law, 384
report, 678
selection of national landmarks, NPS criteria, 8554
see also names of historic sites.
Historical chart book, 16591
History:
American, publications, price list, 18151
historical handbook series, 1533
announcement and order form, 8621
national defense education act—
institutes for advanced study, summer 1967, handbook for directors, 1003
instruction, financial assistance guidelines, 13956

History—Continued

- national defense education act—cont.
loans to private nonprofit elementary and secondary schools for equipment and materials, 1007
Smithsonian Journal of history (periodical), 3879
see also Military history—Naval history—also names of departments, etc.—also subjects.
- History and Geography, Pan American Institute of, *see* Pan American Institute of Geography and History.
- History and Technology Museum: battle art, exhibition, 8680
contributions from, 9951, 11602
title page, contents and index, 14529
Smithsonian Institution, growth of United States, 1640-1851, exhibition, 18203
White House china of Lincoln Administration, 15600
- Hitchell site, archeology, 10081
Ho Koon Chew, relief, 9251
Ho Song Hyung, *see* Song Hyung Ho.
- Hobbies:
hobby shops, bibliography, 17194
publications, list, 5411
- Hobbs, Horton H., Jr.:
crayfishes and their epizoitic ostracod and branchiobdellid associates of Mountain Lake, Va., region, 15604
new crayfish from Alabama caves, notes on origin of genera *Orconectes* and *Cambarus* (Decapoda: Astacidae), 17050
new genus and species of—
 entocytherid ostracods, 5305
 ostracods with key to genus *Dactylocythere*, 6966
- Hobson, Carol J., fall 1966 statistics of public elementary and secondary day schools, 7896
- Hoc tap (North Vietnam periodical): translations, 3945
- Hodge, Paul W., Large Magellanic Cloud, 8651
- Hodges, Ronald W., revision of Nearctic Gelechiidae, 1. Lita group, (Lepidoptera: Gelechiidae), 6949
- Hodgkiss, W. S., environmental testing of contaminant producing materials from integrated life support systems, 11416
- Hodgson, H. J., progress in range research, 17 western States, 6136
- Hoertel, Frederick W., rhenium and rhenium-tungsten deposition by thermochemical reduction of hexafluorides, 9767
- Hofacker, Gerhard, relief, 9244
- Hoff, Ebbe C., compressed air, diving and submarine medicine, 6628-29
- Hoffman, C. M., quantitative determination of tritium in natural waters, 1130
- Hoffman, Donna R., international symposium on developments in irradiation capsule technology, 8903
- Hofstra, Hilda E. M., relief, 9228
- Hog cholera:
 eradicating, questions and answers, 45
 eradication program, controls over use of vaccines, GAO review, 9549
 what you should know about disease, 43
- Hog-lot equipment, 17312
- Hogan, E. K., soil survey, Judith Basin area, Mont., 7136
- Hogs, *see* Swine.
- Hoh Tribe, judgment funds, disposition, law, 378
- Hohai, China, *see* Host, China.
- Holists:
 automatically stopped at low deceleration rate, 5213
 holisting of mechanically powered vehicles, maritime safety data, 12765
 telescoping bridge crane holist, square tubing reduces cost, 17920
- Holder, Shelby H. Jr., marketing and utilization of cotton mill waste, 9390

Holding companies:

- act of 1935, releases, SEC, 3399
savings and loan holding company act—
 amendments of 1967—
 hearings, 13849, 16316
 report, 13796
see also Banks and banking—Public utilities.
- Holdridge, Leslie, El Real environmental survey, 8895
- Hole, Erling, costs and returns, commercial dairy farms, northeast and midwest, 16488
- Holeski, Donald E., performance evaluation of turbine over range of Reynolds number, 6871
- Holidays:
 certain legal holidays to be always on Mondays, hearings, 15167, 16332
 commercial holidays abroad, list, 9601
 Federal, consolidation, authorization, report, 4601
- Holidays and National Observances Commission, *see* National Observances and Holidays Commission.
- Holland, Robert L., Chicago wholesale food distribution facilities, 7278
- Holland, Spessard L., tributes commemorating 20 years of service, 765
- Hollenbeck, Ronald P.:
 fluorapar in eastern States, 16853
 mineral industry of Alabama, 2548
- Hollis, Alaska, elevation effects on rainfall, 16655
- Hollomon, J. Herbert:
 addresses, etc.—
 May 16, 1966, 244
 Nov. 2, 1966, 243
 Nov. 30, 1966, 4429
 Dec. 15, 1966, 4452
 Jan. 9, 1967, 7568
 Mar. 15, 1967, 7583
 Mar. 29, 1967, 7584
 May 25, 1967, 12130
 June 6, 1967, 12128
 June 8, 1967, 12129
- Holloway, Harold D., manual of procedures and methods for calculating brine disposal costs, 12645
- Holloway, Paul F., orbital recovery problem, etc., 12969-970
- Holmgren, Arthur H., checklist of vascular plants of Intermountain region, 14125
- Holms, Arthur G., designs of experiments as telescoping sequences of blocks for optimum seeking (as alloy development), 14490
- Holothuroides, *see* Sea cucumbers.
- Holsinger, John R., subterranean amphipod genus *Stygonectes* (Gammaridae), 12996
- Holstein cattle, *see* Cattle.
- Holt, E. H., experiments in low energy plasmas, 17942
- Holt Lock and Dam, spillway and navigation conditions, hydraulic model investigation, 4744
- Holyoke, Mass., housing discrimination, report, 4385
- Hom Sheck See, and wife, relief, 9249
- Home canning of fruits and vegetables, 15850
- Home care, *see* Medical care.
- Home economies:
 canning and food preservation, helpful Government publications, list, 15673
 family economics review, 3260
 home and garden bulletins, 31, 1697-98, 4107, 5629-33, 7272, 8831-32, 10171, 11930-931, 13224-226, 14743-744, 15850-855, 17313-319
 homemakers, publications, list, 8206
 homemakers, simplified housekeeping directions, job sheets, Spanish edition, 2387
 program aides, guides—
 fruits and vegetables, 4133
 milk, 47
 sewing by hand, teaching guide, 7286

INDEX 1967

Home economics—Continued
publications, price list, 17132
research reports, 13227, 15856
Home economists, examination announcement, discontinuance notice, 5932
Home freezers, *see* Freezers.
Home Improvement Month, National, *see* National Home Improvement Month.
Home labor, fair labor standards act, employment of homeworkers in industries, 15819
Home loans, *see* Loans.
Home rule, District of Columbia, reorganization of government, recommendations, message from the President, 7599
Home work in industry, *see* Home labor.
Homemaker service, *see* Visiting housekeepers.
Homemaking, *see* Home economics.
Homeowners, *see* Homes.
Homes:
all-electric, annual bills, 4771.
building, know the soil you build on, 11927
building outlook, and 1967 economy (remarks), 7570
construction, maintenance, community development, publications, price list, 7057
fallout protection—
home basements, evaluating techniques for improving, 5765
homes with basements, handbook, 13425
FHA insured loans for improvements, 4904
FHA insured mortgages—
area trends, 9454, 12504
characteristics, trends, 3333
State trends, 9455, 12506
FHA regulations, amendments—
mortgage insurance, 1046, 6252, 11011
mortgages, 17757
financing home purchases and home improvements, FHA, 16708
fire resistant construction, 15849
heating, economical and efficient system, description, etc., 15874
home health agency manual, revisions, 8687, 18206
homemaker-home health aide in personal care, training, 15714
homeowners, losses incident to closing military installations, assistance, authorization—
hearings, 7796, 9147, 13695, 16395
law, 17555
reports, 9277, 10564, 10572, 13684, 13688, 16284, 16371
improvements, three ways to finance through FHA, 11202
mortgage debt, estimated, quarterly, 3244
national forest summer home permits terminated, compensation to permittee, hearing, 17586
one-family, sales, 1965 annual statistics, 4305
supervisor, examination announcement, amd., 12107
trade-ins, how FHA helps, 4901
trees, color it green, calendar of activities for arborists, 5676
vacation, northern New England, 1966 study, 18116
veterans—
FHA mortgage insurance, 11201
home buying guide, 17286
wood products for, selection and use, 7264
see also Housing.
Homes (institutions), *see* Children's homes—Nursing homes.
Hominy grits, domestic corn (hominy) grits bulletin, 3213
Homocœanu, Emil, relief, 287, 843
Homogeneous turbulence, *see* Turbulence.
Homopolar generators, performance, improved with high reluctance rotor rings, 5153
Homoptera, general catalogue, 12
see also Leathoppers.

Honda, Nobu, plantation timber on Island of Kauai, 16665
Honduras:
amateur alien radio operators, authorization to operate, agreement, 15773
background notes, 8707
capsule facts for Armed Forces, 10248
mineral industry, minerals yearbook chapter, 14331
records of Dept. of State, microcopy, pamphlet to accompany—
internal affairs, 18064
political relations with U.S., 18065
Honey:
comb, U.S. standards for grades, 13893
greater wax moth, pest of honeycombs, control, etc., 10169
market news, monthly report, 3400
production—
annual summary, 11878
estimates, 1955-64, by number of colonies of bees, yield per colony, etc., by States, 4150
statistics, 2939
Honey bees, *see* Bees.
Honeycomb structures, *see* Laminated materials.
Hong Kong:
background notes, 5522
capsule facts for Armed Forces, 13285
cotton textiles, trade agreements, 2920
mineral industry, minerals yearbook chapter, 11358-359
visit of N. S. Savannah, agreement, 15795
Honolulu Magnetic Observatory, magnetograms and hourly values, 7552
Honors (military), *see* Military ceremonies, honors, and salutes.
Honors (naval), *see* Naval ceremonies, honors, and salutes.
Hoods (head-piece):
protective passenger smoke hood, aviation medical report, 14512
Hooker, G. Vernon, Air Force scientific research bibliography, 7304
Hooker, Verno E., stressers in rock outcrops near Atlanta, Ga., 1409
Hooper, J. R., steady-state and dynamic operating characteristics of simulated 3-loop space Rankine-cycle powerplant, 2603
Hoopes, Townsend, nomination, hearing, 15149
HOPE, highlights of personal experiences in Department of Agriculture under President's Youth Opportunity Campaign, 8833
Hopkins, Edward J., aerodynamic characteristics of cranked leading-edge wing body combinations, 18039
Hopkins, Ralph L., synthesis of cyclic sulfides, 12823
Hopper cars, *see* Freight cars.
Hopper dredges, *see* Dredges.
Hops:
foreign agriculture circulars, 3345
industry of United Kingdom, 8047
stocks, 8760
Hord, Jesse, correlations for predicting leakage through closed valves, 17038
Hord, Richard A., kinetic theory of bimolecular chemical reaction, diffusive drag, and other processes in gas mixture, 6909
Horizon:
Earth's horizon radiance profile—
in 15 micron carbon absorption band, 8417
location of reference horizons, derivation, etc., of analytical techniques, 9802
infrared, definition, state-of-the-art report, 8416
infrared radiance profile variations, 8418
star/horizon simulator used to test space guidance system, 11447
Hormuth, Rudolf P., clinical programs for mentally retarded children, 5905

Hornbill
8541
Horne, J.
address
Mar
May
Nov
nomin
Horns (C
Horowitz
Horticult
trend
Horticult
other
7885
Horton,
2997
Horwat
Hose:
assem
flex
copper
tul
ent
Fede
su
flexi
fri
reele
bu
14
rubbe
str
Hosey,
to it
Hoshov
Stat
nica
Hosi,
scrip
Hospit
labor
ansv
publ
Hospit
cent
ic
tr
equi
pack
co
e
g
n
Hospit
am
Hospit
127
Hospit
cou
Hospit
Boo
of
Fu
Hospit
Hosp
age

Hornbills, biting lice found on Bucerotidae, 8541
 Horne, John E.:
 addresses, etc.—
 Mar. 28, 1967, 7960
 May 12, 1967, 9452
 Nov. 13, 1967, 17756
 nomination, hearing, 12401
 Horns (radio), see Antenna horns.
 Horowitz, Sylvia, publications of North-eastern Forest Experiment Station, 11135
 Horticultural products, imports, composition, trends, and sources, 16641
 Horticulture, ornamental, marketing and other economic information, bibliography, 7855
 Horton, James A., agricultural marketing, 2997
 Horwath, Ellsabetta, relief, 13604
 Hose:
 assembly, lightweight all-metal, has high flexibility and strength, 6797
 copper, flexible, protected by plastic tubing, 6755
 entanglements eliminated with rotational fluid coupling, 6754
 Federal item identification guides for supply cataloging, supplements, 3288
 flexible, and metal bellows predicting frictional loss, method, 9825D
 reeled, system for studying vertical distribution of small plankton, evaluation, 14065
 rubber, visual inspection guide, Federal standard, 16902
 Hovey, Andrew D., industrial noise, guide to its evaluation and control, 17152
 Hoshovsky, Alexander, progress of United States Government in scientific and technical communication, 6244
 Hosi, China, Hoshi Corridor, deserts, description, 16777
 Hospital and Medical Facilities Division:
 labor standards for projects, questions and answers, 8634
 publications, bibliography, 5459
 Hospital apparatus and supplies:
 central medical and surgical supply services, manual, 1579
 treatment tray and sets prepared in hospital CM & SSS, cards, 1592
 equipment planning guide, 15691
 packaged disaster hospital—
 central sterile supply section, organization, 1577
 equipment, assembling instructions, 2824
 general stores section, establishing, operating, etc., 2825
 materials, catalog and guide for distribution, 13081
 Hospital attendants, nursing assistant, examination announcement, 10429
 Hospital Corps, Navy, handbook, 5092, 12789
 Hospital corpsmen, 3 & 2, Navy training course, 8578
 Hospital Insurance Trust Fund, Federal, Board of Trustees, see Board of Trustees of Federal Hospital Insurance Trust Fund.
 Hospitalization, see Hospitals.
 Hospitalization insurance:
 aged persons, social security amendments of 1967:
 hearings, 15154, 16409
 reports, 14953, 14964
 summary, 15053
 cost estimates, history, 10082
 experience and r OASDHI system compared to short-range cost estimates, 7117
 extended care facility under medicare, what it means to you, 7125
 home health benefits, how medicare helps to pay agency providing, 7128
 household workers, social security benefits, information, 7122

Hospitalization insurance—Continued
 medicare—
 how it helps when entering hospital, 5513
 people 65 or over, 5511
 social security benefits, information, 10085
 Hospitals:
 birth and fetal death registration, handbook, 11737
 central medical and surgical supply services, manual, 1579
 treatment tray and sets prepared in hospital CM & SSS, cards, 1592
 children in hospital, planning for, 11758
 discharge survey, participating units in pilot study, 2842
 District of Columbia, project grants for construction and modernization, hearing, 16405
 emergencies, preparing hospital plant, 15688
 environmental aspects—
 infection control, 8635
 safety fundamentals, 15690
 supportive departments, 11736
 financial assistance not to be denied because of certain practices, hearings, 17658
 health insurance for the aged, hospital manual, 10084
 Hill-Burton and mental retardation construction authorities, conference with Surgeon General, proceedings, 15692
 hospital and medical facilities, Hill-Burton program—
 equipment planning guide, 15691
 progress report, 7070
 projects approved for Federal aid, register, 3398, 8633, 18169
 series, 1579, 7071, 8634-35, 11736, 15690-692
 hospital and medical facilities series, facilities for mentally retarded, 14629
 hospital laundry, design and equipment, 7071
 indirect cost rates, guide for establishing HEW research grants, etc., 12620
 industry wage survey, 15448
 medical facilities available to Federal employees injured in performance of duty, 16514
 medicare program—
 extended care benefits after hospitalization, 2865
 how it helps when entering, 5513
 military medical benefits act of 1966—
 amend, report, 14941
 law, 365
 report, 664
 outpatient services, how much does medicare pay for, 11797
 packaged disaster hospital—
 assembling equipment, 2824
 central sterile supply section, organization, 1577
 general stores section, establishing, operating, etc., 2825
 laboratory section, 2823
 X-ray section, establishing, operating, etc., 2822
 partial hospitalization, service of community mental health center, 5430
 providers of services under health insurance for the aged, directory, 11794
 Public Health Service—
 dental internships, 15679
 grants, etc., for construction, 1966
 funds, 11755
 patients discharged, diagnostic and demographic data, statistical summary, 8629
 pharmacy residences, 13087
 Public Health Service and community facilities, cooperative activities—
 hearings, 12305, 17670
 reports, 16230, 16247

INDEX 1967

Hospitals—Continued

short-stay hospitals, utilization, summary of nonmedical statistics, 17170
 Turkman SSR, quality and number of medical institutions increase steadily, 14224
 under Fair labor standards act, as amended, 1663
 USSR, report of U.S. delegation on systems planning, 2826
 Veterans Administration—
 administrative research bulletin, 11890
 psychologists, examination announcement, 12113
 see also Mental institutions—Naval hospitals—Veterans hospitals—also names of hospitals.
 Hostettler, R. L., ground-based photometric surveillance of passive geodetic satellite, 11413
 Hostetter, Anita, annotated bibliography of publications, 8052
 Hot Springs County, Wyo., Adam Weiss Peak quadrangle, geology, 2360
 Hot Springs National Park, general information, 6980
 Hot Springs quadrangle, S. Dak., geology, 12597
 Hotchkiss, Nell, underwater and floating-leaved plants of United States and Canada, 15267
 Hotels, employees under fair labor standards act, as amended, 7225
 Houghton, Hubert W.,
 certification requirements for school pupil personnel workers, 9396
 inventory of counselor education programs, 16504
 Hours of labor:
 college students under work-study program, amend act—
 law, 17536
 reports, 14952, 14959, 15125
 compensation expenditures and payroll hours—
 motor passenger transportation industries, 17893
 pipeline industry, 11310
 fair labor standards act—
 handy reference guide, Spanish edition, 5590
 maximum hours standards—
 amendments, 7228
 evaluation and appraisal, 2971
 overtime pay, computing, highlights, 11895
 quick look at hours worked, 11898
 time and pay records, how to keep, 8786
 Federal civilian firefighters, premium compensation, correction of inequities—
 law, 450
 report, 915
 Government officials and employees, FPM supplement, 3305
 historical data on hours and earnings, selected references, 8323
 metropolitan areas of the South, 5071
 nonagricultural industries, measurement, 16825
 nonmetropolitan areas of South and North Central regions, 15447
 output per man-hour indexes—
 industry, 6612
 private economy, 11333
 premium pay provisions for weekend work in continuous-process industries, 5057
 railroad employees, reduce 16-hour limitation for certain employees, hearings, 4634
 retail trade, 8302, 11332
 maximum, study to measure effects of 1961 amendments, 5591
 seamen on board ship, recommendations of ILO convention, withdrawal of treaty, text, 15064

Hours of labor—Continued

union—
 building trades, 14301
 local-transit operating employees, 14300
 motortruck drivers and helpers, 15441
 printing industry, 15445
 women, maximum, by States—
 daily, 2976
 weekly, 8795
 House, Arthur S., communicating by language, speech process, conference proceedings, 7061
 House, Peter W., differential assessment of farmland near cities, experience in Maryland, 17712
 House, T. J., Coast Guard reservist, 3099, 12122
 House Administration Committee, House:
 calendar, 3477
 committee prints, 4543, 7748, 15036
 funds, providing, report, 7680
 hearings, 730-740, 4544
 reports, 639-640, 643-644, 2018, 2029-33, 4517, 6010, 7674-81, 7719-29, 9103, 9105, 10554, 10582-596, 10605, 12240-242, 12269-271, 12280, 13650-656, 14966, 14968-969, 14979, 16228, 16231, 16253, 16263
 House documents, 515-528, 1996-2012, 4464-92, 5975-6001, 7593-7613, 9048-75, 10496-523, 12191-209, 13549-559, 14922-929, 16150-163, 17565-570
 House files, see Files.
 House of Representatives:
 appropriations, 1968, legislative—
 hearings, 10633
 law, 13537
 reports, 10617, 13672, 13813
 calendars and history of legislation, 3469
 candidates, campaign expenditures 1966, report of special committee to investigate, 4510
 contested election—
 Lowe vs. Thompson, dismissal, etc., report, 12270
 Mackay vs. Blackburn, report, 12271
 delegation to conference of Mexico-United States Interparliamentary Group, report, 13704
 delegation to session of Intergovernmental Maritime Consultative Organization, report, 16234
 disbursements, detailed statements, 7748, 15036
 employ additional Capitol police, report, 10584
 history, pictorial story, 517
 journal, 89th Cong. 2d sess., 7591
 legislative employees, training opportunities, report, 16232
 majority and minority rooms, printing operations, etc., exempt from D.C. sales and use taxes, report, 9087
 Members—
 election, redistricting standards, establish, reports, 9121, 9126, 17573
 electric typewriters furnished to, increase number—
 law, 17561
 report, 14969
 four-year terms, hearings, 12417
 stationary allowance, additional, report, 7676
 telephone service outside D.C., payment from contingent fund, report, 10583
 transportation expenses, provide reimbursement—
 law, 17540
 reports, 14968, 15138
 United States Code annotated, or Federal code annotated, distribution to provide, report, 16231
 officers and employees, training under Government employees' training act, hearing, 16431

House of Representatives—Continued
 payment of compensation to committee staff members, report, 7681
 Press Gallery superintendents, Official Reporters of Debates, etc., compensation, report, 3033
 Rayburn Building, construction and related costs, House Office Building Commission, Architect of Capitol, GAO examination, 8131, 9182
 rule 11, par. 26, 6039
 rules, amend, report, 9123
 rules and manual, 7593
 telephone directory, 7592
 House Office Building Commission, construction and related costs of Rayburn House Office Building, GAO examination, 8131, 9182
 House reports:
 private bills, 529-619, 4493-97, 7614-62, 9079-80, 10524-552, 12210-239, 13560-626, 14931, 16164-227, 17571-582
 public bills, 620-706, 2013-36, 4498-4519, 6002-24, 7663-7731, 9081-9137, 10553-623, 12240-285, 13627-690, 14932-15009, 16228-300, 17571-582
 House Resolution 1, Select Committee pursuant to, House:
 hearings, 6038
 investigations and studies, expenses, report, 6010
 report, 7664
 House trailers, see Trailers.
 House Where Lincoln Died, 11613
 Household appliances:
 Federal item identification guides for supply cataloging, supplements, 3292
 ownership and purchases, 1960-67, special report, 14832
 recent purchases and expected expenditures, report of U.S. households, 16027
 selected, production and trade, 1963-65, free world, 7573
 Household goods:
 and commercial furnishing and appliances, Federal item identification guides for supply cataloging, supplements, 3292
 consumer buying intentions, 1878, 5884
 electric housewares, current industrial reports, 4326, 15993
 shipments overseas, charges for accessorial services, GAO review, 11152
 storage, erroneous payments to members of Army—
 law, 486
 report, 4589
 uncrated, traffic regulation, 4194
 volume movements from overseas to continental U.S., potential savings by, Defense Dept., GAO report, 8138
 see also Furniture.
 Household workers, see Servants.
 Households:
 automobiles and selected household durables, ownership and purchases, 1960-67, special report, 14832
 by State, population estimates, 7486
 by type, 1966, population characteristics, 16008
 cars and household durables, recent purchases and expected expenditures, 16027
 food consumption in United States, spring 1965, preliminary report, 15826
 insecticides, guide, 10162
 population characteristics, 7485
 projections of number, 1967-85 population estimates, 5882
 sample survey, Atlantida case study—
 content and design of household surveys, Spanish edition, 5898
 distribution and receipt of materials, 1885
 editing and coding, 4360
 field operations, instruction manuals, 182

Households—Continued
 sample survey, Atlantida case study—
 continued
 population data controls, Spanish edition, 5899
 survey objectives and description of country, Spanish edition, 7496
 tabulation process, 7497
 workbook for case study, 10387
 with television sets in U.S., current housing reports, 7477
 with television sets, UHF and color, in selected metropolitan areas, current housing report, 15989
 Housekeeping, see Home economics.
 Houser, Leroy S., national register of shellfish production areas, 7078
 Houses:
 FHA and VA acquired residential properties, savings possible by consolidating management, GAO report, 11358
 insulating from aircraft noise, study, 14188
 newly constructed, need for strengthened procedures to reduce number of extra final inspections, FHA, GAO report, 11148
 residential financing, impact of 1966 monetary policy (remarks), 7999
 residential mortgage market, and monetary policy, 11055
 vacation, building plans, 8837
 see also Farm buildings—Farmhouses—
 Household goods—Housing.
 Housing:
 act of 1949 urban renewal programs authorized by act, operations report, 3824
 act of 1964, amend—
 law, 14910
 reports, 12360, 14945
 authorized, construction reports, 3135, 8937, 14818
 summary statistics, 3136
 basic information—
 Ethiopia, 6417
 Ghana, 6418
 Ivory Coast, 6419
 Jordan, 6420
 Liberia, 6421
 books, list, 4905
 Brewerville, Liberia, potential savings through constructing rather than leasing, USA, GAO report, 6379
 census, 1960, quality control of field enumeration, 17443
 census, 1970, plans, hearings, 13711
 census publications, price list, 7056
 code of Federal regulations, 11037
 codes and their enforcement in 6 Connecticut cities, 14852
 college housing loans, savings through more frequent payments, GAO report, 17814
 consumer buying intentions, 1878, 5884
 current housing reports, 3168
 current reports—
 housing characteristics, 7477, 15989
 housing vacancies, 1872-73, 7476, 12066, 15988
 dealers and individuals subject to certain sections of title 1, National housing act, list, 11010
 demonstration cities and metropolitan development act of 1966—
 law, 465
 law, summary, section-by-section analysis, legislative history, and conference report, 725
 discrimination in sale, etc., eliminate—
 message from the President, 12199
 report, 4498
 discrimination in Springfield-Holyoke-Chicopee metropolitan area, report, 4385

INDEX 1967

Housing—Continued

elderly people—
 FHA mortgage insurance, 6427
 health services, Dexter Manor story, 5456
 retirement housing, western style (address), 17343
 experimental projects, Housing and Urban Development Dept., list, 6434
 fair housing act of 1967, hearings, 17641
 family—
 migrant agricultural workers, guide, 11924
 Navy design manual, 2764, 17066
 Federal programs—
 progress report, 9309
 study, expenses, reports, 4594, 4625
 FHA multifamily projects, handbook, 2245
 FHA multiple dwelling projects, investigation—
 hearings, 2118, 9314
 report, 12392
 FHA program, experimental, 6426
 films, filmstrips, slides, and audio tapes, bibliography, 11204
 financing condominiums through FHA, 2384, 4903
 good farm worker housing is good farm business, 2194
 handbook, improved farm worker housing guide, 17728
 Hawaii, 1965-70, forecast of requirements, 16664
 housing and planning references (periodical), 3402
 housing and urban development act—
 amend and extend, hearings, 10641
 beautification aids for urban areas, 6415
 housing and urban development notes (periodical), 3403
 housing and urban renewal in Nashville-Davidson County metropolitan area, report, 12099
 insurable loans, digest, 6433
 intern program planned for accelerated professional growth and advancement, 4899
 laws, compilation, 12290
 legislation for 1967, proposals, hearings, 13847
 print additional copies, report, 15139
 living units, minimum property standards, interim revision, 6257
 loans guaranteed by VA in Illinois, potential savings by revising procedures relating to default, GAO report, 11151
 low and moderate income groups, new programs, 8193
 low cost, minimum property standards, 1137, 8201
 low-income families, leasing program administered by local authorities, 2382, 11199
 maintenance employees at region 6 housing authorities, HUD, GAO review, 2349
 measuring quality of housing, appraisal of census statistics and methods, 13413
 mid-decade census, take in 1975, etc., hearings, 10666
 middle-aged and older people, patterns of living, 14634
 military, family—
 appropriations, 1967, law, 457
 appropriations, 1968, hearings, 15016, 16305, 17637
 telephone service, methods used to provide, Defense Dept., GAO review, 6388
 minimum property standards—
 elderly and handicapped persons, 9582
 multifamily, 11014-15
 mortgage credit, Federal policies, hearings, 15151
 national housing act, amend—
 hearings, 13849, 15019, 16316
 reports, 4500, 4502, 13796

Housing—Continued

national housing act and other laws, correct obsolete references—
 law, 10488
 reports, 6085, 9137
 nonprofit-sponsored, for open occupancy, 8202
 owner occupied, imputed income, 7129
 public, low-rent, local authorities participating in PHA programs, 3520
 publications available from Division of International Affairs, HUD, 8205
 racial discrimination (statement), 13057
 rehabilitation, HUD programs, report, 17643
 rent subsidy, large-family, demonstration program, report, 5295
 rent supplement assistance, FHA regulations, 1048
 rent supplement proposals, guide for sponsors and housing owners, 6424, 11200
 rental & co-op—
 families of low and moderate income, FHA mortgage insurance, 12624
 rural areas, loans, 10194
 rental housing, FHA program, what is it, how it works, 6423
 rural, Farmers Home Administration loans, 10188
 sales, construction reports, 4305
 sales of new one-family homes, construction reports, 3138
 savings and home financing, source book, 1966 data, 14023
 senior citizens—
 loan program, information for applicants, 16712
 loans to nonprofit corporations, 2383
 Nation's Capital, program, 11593
 starts, construction reports, 3137
 statistics, monthly, 3404
 tenants' rights, legal tools for better housing, report on conference, 14277
 urban market analysis, 11205
 urban renewal directory, 4008, 15725
 urban renewal project characteristics, 15726
 vacant units in U.S., 1872-73, 7476, 12066, 15988
 Veterans Administration policy, loan guaranty and direct loan programs, hearings, 12319
 Washington, D.C., area, Federal employee's guide, 4906
see also Barracks and quarters.
 Housing and Home Finance Agency, general records, preliminary inventory, 14507
 Housing and Urban Development Department:
 aids for fallout shelters, 12625
 annual report, 8196
 appropriations, 1967, supplemental, hearings, 2040
 appropriations, 1968—
 hearings, 15147
 reports, 10600, 15131
 consumer bulletins, 2384, 4901, 4903-4, 6422-28, 8197, 11199-203, 12623-624, 12626, 16708, 17838
 Consumer Relations Services, newsletter, 3146
 Division of International Affairs, available publications on housing, building, and planning, 8205
 establishment, correct obsolete references in laws—
 law, 10488
 reports, 6085, 9137
 Federal beautification and open-space land programs, questions and answers, 4902
 flood insurance program, establish, hearings, 12400
 General Counsel, nomination of Thomas C. McGrath, Jr., hearing, 6092
 honor awards for design excellence, 16710

Housing and Urban Development Department—Continued

housing-intern program, brief description of main features, 4899

HUD at a glance, general information, 6429

HUD IP—(series), 2380-84, 4900-4, 6422-30, 8197, 11200-203, 12623-626, 16708, 17835-838

HUD-MP (series), 2385, 4905-7, 6431-32, 8198-8200, 9580, 11204, 12627, 14187, 15317, 16709-710, 17839

HUD PG—(series), 1137, 4908-9, 6433, 8201-3, 9582

HUD SP MP series, 15317

HUD TS—(series), 6434-35, 8204, 11205-207, 14188, 16711, 17840

HUD, what it is, what it does, 17836

job where the action is, 4907

maintenance employment classifications and wage rates, region 6, GAO review, 2349

mass transportation program, emergency provisions, temporary extension—law, 13522

reports, 12388, 13634

meeting with officials, hearings, 9150

opportunities for reducing Federal contributions by maximizing investment of excess funds held by local housing authorities, GAO report, 6376

past, present and future report (remarks), 9581

press releases, 3735

publications, list, 6431

rehabilitation programs for existing housing, report, 17643

selected publications, list, 8199

strengthening community services in low-income neighborhoods, concerted services with HEW, task force report, 17840

technical studies and experimental housing projects, list, 6434

urban transportation programs help urbanites, 17837

Housing Assistance Administration:

audit report, 5997

college housing loans, savings through more frequent payments, GAO report, 17814

financial statements, 1966, GAO examination, 4875

Housing insurance, *see* Mortgage insurance.

Housley, Mrs. A. E., relief 7621, 10477, 10706

Houston, Billy J., methods of reducing size and number of voids on formed concrete surfaces, 16529

Houston, Sam, Fort, *see* Sam Houston, Fort.

Houston, Tex., area wage survey, 16819

Houston County, Ga., soil survey report, 14656

Hout, Jerry L., contribution toward bibliography on brant, 16634

Hovenweep National Monument, general information, 15612

Hovering:

performance characteristics of rotor with and without blade-pitch servo-control flaps, 5260

V/STOL height control requirements under visual conditions, 11524

How foreign policy is made, 2881

How our laws are made, 10520

reprinting, reports, 10589, 10788

How to compute injury rates, 9701

How to investigate accidents, 9712

How to train workers on the job, 5718

How to use USDA grades in buying food, 5671

Howard, Dean D., microwave monitoring of sea water contamination of Navy fuel oils, 15637

Howard, James C., application of computers to formulation of problems in curvilinear coordinate systems, 9906

Howard Hanson Dam, outlet works and stilling basin, hydraulic model investigation, 2201

Howe, Harold, II:

addresses—

June 5, 1966, 996

June 14, 1966, 998

June 18, 1966, 1004

June 21, 1966, 1015

July 14, 1966, 9403

Aug. 9, 1966, 9408

Aug. 25, 1966, 9412

Sept. 29, 1966, 9407

Oct. 14, 1966, 9404

Oct. 23, 1966, 7892

Nov. 18, 1966, 2192

Nov. 30, 1966, 2188

Dec. 6, 1966, 2179

Feb. 13, 1967, 6177

Feb. 23, 1967, 6179

Mar. 1, 1967, 7903, 7918

Mar. 4, 1967, 6190

Mar. 9, 1967, 7902

Mar. 19, 1967, 7900

May 22, 1967, 10935

June 11, 1967, 12463

June 13, 1967, 12462

July 10, 1967, 12464

July 21, 1967, 13957

Aug. 7, 1967, 15210

Aug. 10, 1967, 13965

Aug. 22, 1967, 15214

Sept. 22, 1967, 16512

Sept. 26, 1967, 16505

Oct. 24, 1967, 17716

education, everybody's business, aspects of contemporary scene, 6180

human frontier, remarks on equality in education, 1006

Howell, John R., boiling bubbles in water from artificial nucleation sites of known geometry and size, 14491

Hower, Roland O., freeze-dry preservation of biological specimens, 6950

Howitzers, rigging for airdrop, technical manual, 15950

Hoy, Fun Wat, relief, 337

Hoyle, Bernadette W., information services in public welfare agencies, 10134

Hoyt, Charles D., mineral industry of Bolivia, 12798

Hruschka, Howard W.:

sprout prevention in potatoes, 17301

storage and shelf life of packaged rhubarb, 5445

Hsia, Tao-tai, guide to selected legal sources of mainland China, 11338

Hualapal Indian Reservation, leasing of Indian land for 99-year term, authorize, report, 12244

Huang, K. P., thrust augmentation characteristics of jet ejectors, 10290

Hubbell Trading Post National Historic Site, general information, 18091

Huber, N. King, Cenozoic volcanic rocks of Devils Postpile quadrangle, eastern Sierra Nevada, Calif., 14170

Huber, Norman W., soil survey of Red Willow County, Nebr., 11809

Huber, Paul W., deduction of reentry plasma properties about manned orbital spacecraft from radio signal attenuation data, 14494

Huckleberries, *see* Blueberries.HUD, *see* Housing and Urban Development Department.

Huddle, Franklin P., contributions of science and technology to Federal crime insurance, 16437

Huddleston, Jerry S., soil survey of Tate County, Miss., 11811

Hudelson, John C., screw-seal performance in vacuum environment, 6885

Hudson, C. Michael, investigation of fatigue crack growth in Ti-8Al-1Mo-IV (duplex-annealed) specimens having various widths, 8494

INDEX 1967

Hudson, Catheryn Seckler, *see* Seckler-Hudson, Catheryn.
Hudson, John A., navigator, 3612
Hudson, Wayne R., effect of tensile stress on current-carrying capacity of commercial superconductors, 2719
Hudson Bay :
 sailing directions, 13020
 surface water quality of basin, 2375
Hudson Strait, oceanography, 10445
Huerta, Ramiro Velasquez, *see* Velasquez Huerta, Ramiro.
Huertado, Felix P., Hurtado Perez, Felix.
Huffman, Claude, determination of gold in geologic materials by solvent extraction and atomic-absorption spectrometry, 16688
Hughes, B. C., Project Pre-Schooner II, Bru-nau Plateau, Idaho, technical director's summary report, 5781
Hughes, G. H., techniques used to measure evaporation from Salton Sea, 9572
Hughes, Harry M., manipulating dates and time lapses in computerized records system, 72
Hughes, Kathryn S., storing food at home, aid to extension and village workers in many countries, 14022
Hughes, Leon S., reconnaissance of chemical quality of surface waters of Neches River basin, Tex., 17830
Hughes, Patrick E., mariners weather log (periodical), 3541
Hughes, R. E., naval weather service computer products manual, 15618
Hui Yoo Young, *see* Yoo Young Hui.
Hull, E. W. Seabrook, atom and the ocean, 15978
Hull, Melvin K., evaluating winds aloft by simplified field technique, 4838
Hulls (ships) :
 structures—
 behaviour, survey of recent British work, 5488
 residual strains and displacements within plastic zone ahead of a crack, 5489
 testing basin of Navy, means of experimentation and research, France, 11258
Hulsing, Harry :
 measurement of peak discharge at dams by indirect method, 9376
 velocity-head coefficients in open channels, 1133
Human engineering :
 aerospace systems and equipment, design criteria, military standard, 15191
 critical tracking task, theory and experiments with first-order divergent controlled element, 1426
 human factors research and development, 12th annual conference, proceedings, 4219
 weather forecasting, human processing of information, 8862
Human factors, *see* Man-machine systems.
Human factors in engineering design, *see* Human engineering.
Human frontier, remarks on equality in education, 1006
Human race, *see* Man.
Human relations, future international meetings, world list, 4074
Human resources, *see* Ability.
Human rights, *see* Civil rights.
Human Rights Committee, *see* United States Committee on Human Rights.
Human Rights Year, International, *see* International Human Rights Year.
Human water exchange in space suits and capsules, 12863
Humanities :
 in defense of nonpragmatic curricula studies (address), 7900

Humanities—Continued
 national defense education act, loans to private nonprofit elementary and secondary schools for equipment and materials, 1007
Humanities, National Endowment for the, *see* National Endowment for the Humanities.
Humes, Arthur G. :
 new cyclopoid copepods associated with—
 alcyonarian coral, 6959
 coral *Psammocora contigua* (Esper) in Madagascar, 6965
Humes, Glenn D., relief, 254, 799
Humidity :
 sensor, fluidic oscillator used for measuring, 8473
 sound absorption in air versus humidity and temperature, 6707
Hummel, Don :
 addresses, etc.—
 Feb. 15, 1967, 6436
 Sept. 26, 1967, 6715
Humphrey, Hubert H. :
 addresses, etc.—
 Oct. 11, 1966, 5446
 Nov. 16, 1966, 1961
 Jan. 19, 1967, 4455
 Jan. 26, 1967, 9580
 Feb. 7, 1967, 14209
 Mar. 14, 1967, 17839
 Aug. 7 and 8, 1967, 15317
 one million dropouts, Sputnik of 1967, 1721
Humphrey, Maurice E., soil survey of Caldwell County, Ky., 8695
Humphrey, Thomas F., paper presented Jan. 1967, 5478
Humphreys, Clark M., sensible and latent heat losses from occupants of survival shelters, 7092
Hung-ch'i (periodical) :
 translations, 3946
Hungarian Meteorological Society, 39th plenary session, work reported, 14220
Hungary :
 Academy of Sciences, secretarial report of Department of Biological Sciences, 1269
 catalysis research, current status, 16739
 chemical processing, role in national economy, 1233
 claims of inhabitants, payment, hearing, 732
 computer center, operation of Minszk-22 digital computer described, 15355
 cooling-lubricating fluids for metal-working, development, research results, 14232
 data processing programs, 15375
 doctor and candidates—
 degrees awarded, 1232, 14218
 lists, 1301, 9632
 electron spin resonance research conducted in field of macromolecular chemistry, report, 11256
 Hungarian journalist reports on war in Vietnam, 4988
 Industrial radiation chemistry, 14266
 International geodetic conference, 6545
 large scale maps for city, construction and technical planning, requirements, 4981
 meteorology, translation, 15417
 mineral industry, minerals yearbook chapter, 5111
 plant-protecting agent industry and research, world status, with special reference to Hungarian conditions, 16750
 scientists and scientific organizations, news, 2455
 solid-state physics, new developments, 16751
 study mission report, 7809
 technical mechanical research status surveyed, 15415
 tubes, semiconductors, and selenium rectifiers production conference, 9634

Hungary—Continued
USSR boundary, study, 17224
water resources and their conservation, 12705

Hunger:
America—
hunger and malnutrition, hearings, 16428
provide nutritious food on emergency basis to any individual to prevent human suffering—
hearing, 17587
report, 15080
India, relieve victims, U.S. participation—
hearings, 7792, 9138
law, 9037
reports, 7783, 9083, 9085
race between hunger and hope, hunger is ahead, picture story, 17331
threat of world hunger, greatest challenge facing mankind (address), 23
war on hunger, export potential for U.S. agribusiness (remarks), 16111
war on hunger, monthly news report, 8229
Hunn, Joseph B., bibliography on blood chemistry of fishes, 17783
Hunsaker, Jerome C.:
reappointment—
law, 12169
reports, 10605, 10741
Hunt, Noel C., III, immersion diuresis, 15896
Hunter, A. R., photoelasto-plastic method to study stress distributions in vicinity of simulated crack, 8406
Hunter, H. Foster, relief, 253, 836
Hunter, J. Scott, academic & financial status of graduate students, spring 1965, 17715
Hunting:
migratory bird regulations, 1080, 14061, 16623
more hunting space, ASCS program aid, 7292
Hunting Island Beach:
hurricane survey, engineer report—
departmental edition, 9418
document edition, 9072
Huntington, N.Y., population, special census of town, 16022
Huntington, W. Va., wholesale food distribution facilities, 4
Hurdle, Burton G., monostatic acoustic scattering from ocean volume, 13034
Hurlburt, Evelyn M.:
radioisotope experiments in high school biology, 5797
radioisotope techniques for instruction in biological sciences, 8910
Hurley, Evelyn M., survey of finance companies, 11060
Hurley, William J., relief, 7635
Hurley West quadrangle, N. Mex., geology, 12601
Huron, Lake, small craft, gale and whole gale warning facilities chart, 14723
Hurricanes:
administrative leave for Federal employees, hearing, 748
Betay, nurses serve in disaster, 18168
greatest storm on earth, 17738
Project Stormfury, ESSA fact sheet, 16538
safety rules, 16534
surveys, engineer reports—
Alabama Coast—
departmental edition, 10948
document edition, 10507
Beaufort Inlet to Bogue Inlet, N.C.—
departmental edition, 2203
document edition, 1996
Bogue Inlet to Moore Inlet, N.C.—
departmental edition, 2204
document edition, 1997
Cape Fear to North Carolina-South Carolina State line—
departmental edition, 2205
document edition, 2005

Hurricanes—Continued
surveys, engineer reports—continued
Edisto and Hunting Island Beaches, S.C.—
departmental edition, 9418
document edition, 9072
Mississippi coast—
departmental edition, 10957
document edition, 10506
Outer Banks between Ocracoke Inlet and Beaufort Inlet, N.C.—
departmental edition, 2215
document edition, 2004
Hurtado Perez, Felix, relief, 552
Husack, Ralph, effect of gamma radiation on reaction of anthracite with fluorine and chlorine, 2585
Husbands and wives:
budgeting for young couple, guide, 17318
District of Columbia motor vehicle or trailer registration, facilitate addition of name of spouse of owner—
law, 12178
reports, 12382, 13640
food for young couple, 15852
married couples in Peace Corps, 5379
mentally retarded or physically handicapped spouses of members of Armed Forces, use of private facilities, report, 14941
Husby, David M., oceanographic observations, North Atlantic Ocean Station Charlie, 10444
Huss, Ralph E.:
records of Dept. of State relating to—
Belgium and other states, 18069
internal affairs of Honduras, 18064
political relations between U.S. and Belgium, 18068
Huston, James A., sinews of war, Army logistics, 1397
Hutchinson, John E., long term forecasts of supply and demand of agricultural and livestock products in Venezuela, 12456
Hutkin, I. J., vapor gap osmotic distillation process, 2394
Huyck, Earl E., health, education, and welfare indicators, 3394
Hwa Hwang Duk, see Hwang Duk Hwa.
Hwang Duk Hwa, relief, 10545, 13519, 13756
Hybrid solid state switch replaces motor-driven power switch, 12896
Hybridization:
escoids, interspecific hybridization, hatching success, pattern development, and fertility of F₁ hybrids, 12551
natural hybrids among pond, loblolly, and pitch pines, 14137
Pinus contorta X banksiana, performance, 9533
Hyde, Rosel H., nomination, hearings, 6094
Hydrates:
beryllium sulfate, low-temperature thermodynamic properties, 9777
multivalent cations, new class of molten salt mixtures, 9704
reaction kinetics, studies, 6447
Hydration:
hyperhydration and parotid flow in man, 7349
thermodynamics and kinetics, 6446
Hydraulic engineering, circulars, 14640
Hydraulic fluids, see Fluids.
Hydraulic machinery, prop, lightweight recoverable, design and development, 17913
Hydraulic mine filling, vibratory compaction of backfill, 9774
Hydraulic turbines, see Turbines.
Hydraulics:
acoustic velocity meter, report on system development and testing, 14167
applications of hydraulics, 9576, 11184-185, 14176
high-energy-rate magnetohydraulic metal forming system, 11463
hydraulically controlled flexible arm can bend in any direction, 6788

INDEX 1967

Hydraulics—Continued model investigations—

- Arkansas River—
 - lock and dam no. 4, navigation conditions, 2221
 - navigation entrance, 17737
 - project, low-lift locks, filling and emptying systems, 4743
- Belleville Locks and Dam, Ohio River, navigation conditions, 1030
- Burns Waterway Harbor, Ind., stability of proposed breakwater, 7933
- Columbia Lock and Dam, Ouachita River, navigation conditions, 6212
- Eau Galle Reservoir, Eau Galle River, 10960
- Gering Valley project, drop structure, 6213
- Hilo Harbor tsunami barrier, 2220, 16526
- Holt Lock and Dam, Warrior River, Ala., spillway and navigation conditions, 4744
- hopper dredge dragheads, 6211
- Howard Hanson Dam, Green River, Wash., outlet works and stilling basin, 2201
- Little Sioux River, Iowa, control structure, 7931
- Lower Monumental Dam, Snake River, Wash., spillway and stilling basin, 10949
- McAlpine Locks and Dam, navigation conditions, 6210
- Millers Ferry Lock and Dam, Alabama River, navigation conditions, 10961
- Turtle Creek, Pa., channel improvement, 7932
- Willow Springs and Sag Junction diversions, Chicago Sanitary and Ship Canal, 10962
- Morrow Point Dam, hydraulic model studies, 13103
- physiographic and hydraulic studies (series), 17823
- potassium performance during condensation in single tubes, 15506
- quick-response servo amplifies small hydraulic pressure differences, 6696
- river hydraulics (series), 1133
- roughness characteristics of natural channels, 17833
- service brake systems for automotive vehicles, Federal standard, 6321
- Hydrazine:
 - acetylene black in hydrazine, study of thixotropic suspensions, 11679
 - acute toxicity in mice, toxicologic studies, 4183
 - effects on—
 - fat transport as affected by blood glucose concentration, 65
 - liver glycogen, arterial glucose, lactate, pyruvate and acid-base balance in anesthetized dog, 7359
 - renal blood flow, preliminary study, 11967
 - gas chromatographic column enables analysis of propellant hydrazines, 2681
 - in-vivo inactivation of antihemophilic globulin, relation to fibrinolytic mechanism, 14771
 - tissue monoamine oxidase inhibitions by convulsogenic doses, 4181
 - TmPAH depressed by exposure to, effect of sodium acetate, 4177
 - trace amounts in aqueous solutions accurately determined by gas chromatography, 15550
- Hydrazones, tissue monoamine oxidase inhibitions by convulsogenic doses, 4181
- Hydrides, *see* hydrides by names, e.g., Titanium hydride.
- Hydrobiology, *see* Marine biology.

Hydrocarbons:

- aromatic—
 - distillable, identification from coal tar, 12795
 - spark-source mass spectra, using spinning electrode, 11380
- chlorinated, pesticides, identification and measurement in surface waters, 4800
- fuels, flammability properties, 17094
- higher order synthesis, on hot tungsten filaments, 8504
- lubricants, temperature limitations in ball bearings, 15576
- Hydrocortisone:
 - effects of 9-alpha-fluorohydrocortisone and venous occlusive cuffs on orthostatic deconditioning of prolonged bed rest, 7365
 - rapid transfer of cortisol from bloodstream to parotid fluid, 11962
- Hydrodynamics:
 - application of Lyapunov stability theory to nonlinear problems, 16915
 - journal bearings, operation in sodium to 800° F. etc., 9901
 - see also* Magneto-hydrodynamics.
 - Hydroelectric power, *see* Electricity.
 - Hydroelectric power plants, *see* Electric power plants.
- Hydrogen:
 - atomic, metastable state, comparison of Gryzinski and Born cross sections, 9874
 - ball-bearing retainer materials in 60° R (33°K) gas at 0.8 million DN value, film-transfer studies, 2709
 - chemisorbed on platinum electrode, interaction of carbon dioxide, errata, 8586
 - cryogenic, flowing turbulently in straight and curved tubes at high heat fluxes, heat transfer, 6713
 - embrittlement of ultrahigh-strength steels, study to minimize, 11470
 - gaseous—
 - and liquid-oxygen combustors, chugging instability, 11547
 - flow system and application to high-frequency combustion instability, 12953
 - rocket engine performance at stagnation temperatures up to 200,000 R, 6719
 - helium, pressurant requirements for liquid-hydrogen expulsion using submerged gas injection, 14492
 - hydrogen slush-hydrogen gel utilization as fuels for space vehicles, 18006
 - interstitial, of palladium, low-temperature specific heat, 1548
 - liquid—
 - densitometer utilizes open-ended microwave cavity, 11452
 - normal gravity self-pressurization in spherical tankage, 18019
 - storage and transport, USSR study, 15403
 - turbine type flowmeters, performance, 2728
 - use in determining wear and friction of polymer laminates, 2693
 - liquid-oxygen-gaseous hydrogen rocket combustion at supercritical chamber pressures, 17001
 - maser as highly stable frequency reference, 11475
 - molecular, estimation of electron impact excitation cross sections, 11546
 - oxidizer-rich oxygen-hydrogen combustion characteristics, preliminary investigation, 2708
 - plasma, superheated, using induction heating of cold plasma and DC plasma enhancement, production, 5166
 - purification train produces ultrapure gas, 9842
 - quantum mechanical calculations of 2d virial coefficients, 8627

Hydrogen—Continued

saturated liquid parahydrogen charted for important temperature range, thermodynamic properties, 17928
storage vessel on moon, thermal characteristics, 5259
supersonic mixing of hydrogen and air, 9807

Hydrogen cyanide from reaction of coal with ammonia, 14349

Hydrogen fluoride:

ordinary and deuterated gaseous, and their equimolar mixture, thermal conductivities, 12961
separation of HF from $\text{HF-SiF}_4\text{-H}_2\text{O}$ mixtures, 2581

Hydrogenation, distillate fuels, studies, 12817

Hydrogeology, geohydrology of Souris River Valley in vicinity of Minot, N. Dak., 14184

Hydrographic Organization, International, see International Hydrographic Organization.

Hydrography, hydrographic and oceanographic systems for training, 11670

Hydrologic Laboratory, Geological Survey, rock and soil materials, hydrologic and physical properties analyzed, summary, 8182

Hydrologists, career professional positions, examination announcement, amdt., 5920

Hydrology:

agricultural, evaluation by monolith lysimeters, 5687

Alaska earthquake of 1964—
effects on hydrologic regimen (series), 1122-23, 1177-178

hydrologic effects outside Alaska, 11177
Alaska, south-central, 1964 earthquake effect on hydrology, 1122

Anchorage area, Alaska 1964 earthquake effect on hydrology, 1123

annual growth of suppressed chestnut oak and red maple, basis for hydrologic inference, 11171

cavernous limestones of Mammoth Cave area, Ky., 1132

contributions to hydrology—
Africa and Mediterranean region (series), 11189

Asia and Oceania (series), 11187

United States (series), 2376, 4893, 8177, 8181-83, 11190, 12618, 14181-182, 16704, 17830-831

Cornfield Wash area, Sandoval County, N. Mex., 6412

Eddy County, N. Mex., between Lake McMillan and Carlsbad Springs, 8178

Geological Survey research, 2372, 4891, 11182, 14175

Guam, Mariana Islands (series), 119

hydrologic cycle, 16535

hydrologic data, computer systems for reduction and analysis, 13197

hydrologic data, Oak Ridge area, Tenn., 16704

hydrologic performance of floodwater retarding structures during Colorado storms of June 16-17, 1965, report, 14651

hydrologic properties of earth materials (series), 16701

hydrological factors, effects on agriculture, USSR studies, 4938

hydrology and ecology, Pine Barrens, New Jersey (series), 6408

Kern River alluvial fan area, ground water, 1116

Lake Bonneville, Weber Delta district, including Ogden, Utah, 6400

Lompoc subarea, Santa Ynez River basin, Santa Barbara County, Calif., 1957-62 inventory, 1117

Hydrology—Continued

meteorology and hydrology (USSR periodical), translations, 1278, 1839, 9642

National Reactor Testing Station area, Idaho, 16690

northeastern Nassau County, Long Island, N.Y., 4894

Pahrump Valley, Nev.-Calif., valley-fill and carbonate-rock reservoirs, 14178

rock and soil materials, hydrologic and physical properties as analyzed 1948-60, Hydrologic Laboratory, Geological Survey, 8182

SCS national engineering handbook, 10087

surface water, California coastal basins between San Francisco Bay and Eel River, 15315

Swatara Creek basin of southeastern Pennsylvania, evaluation of hydrologic system, 16703

theoretical papers in hydrologic and geomorphic sciences (series), 2366

USSR literature for 1966, list, 1174

USSR studies, 6564

vegetation and hydrologic phenomena (series), 11171

see also Water.

Hydrometeorology:

Bulgaria, hydrometeorological service tasks discussed at 9th Congress of Bulgarian Communist Party, 11253

hydrometeorological report, 5594

hydrometeorological services of socialist countries of Europe, conference of directors, USSR study, 1179

noise-rejection coding of digital teletype communications in complex automatic hydrometeorological telemetering systems, USSR study, 8275

numerical weather forecasting methods used in hydrometeorological service, USSR study, 1184

USSR, hydrometeorological services news, 1175

Hydrooptics, visual resolution underwater, 14317

Hydrospace, radiolotope applications, 1776-77, 5760-62

Hydrostatics:

force used to handle outsized, heavy objects, 12897

porous mandrels provide uniform deformation in hydrostatic powder metallurgy, 12916

pressure, large-diameter ring-stiffened cylinder subjected to, test, 1479

Hydroxyl, radicals, reaction rates with carbon monoxide, 16997

Hygiene:

city planning problems, USSR conference, 5002

contributions of scientists in hygiene, physiology, and scientific organization of labor, USSR study, 16767

industrial, publications, price list, 17135

labor hygiene and occupational diseases (USSR periodical), translations, 6510

labor, USSR studies, 1313

public health organization principles, USSR study, 1192

see also Health.

Hygiene and Epidemiology Institute, Bulgaria, organization and tasks, 6497

Hyland, Howard L., plant inventories, plant material introduced, 8810, 15828

Hymenoptera, American north of Mexico, 7267

see also Wasps.

Hyperbaric atmosphere, see Atmosphere.

Hyperbaric hemolysis, see Hemolysis and hemolysins.

Hyperhydration and parotid flow in man, 7349

Hypersonic airplanes, see Airplanes.

INDEX 1967

Hypersonic flow, see Flow.
Hypersonic performance of several basic and modified diamond-cross-section delta wing configurations, 9884
Hypersonic speed, see Air speed.
Hypertension, see Blood pressure.
Hyperthemia, carotid and femoral artery blood flow in hyperthermic cats, 5710
Hypnosis, treating neurodermatitis patients with electrosleep and hypnosis, USSR excerpt, 17874
Hypnotics and sedatives:
 depressants—
 bibliography, fact sheet, 14073
 fact sheet, 12556
Hypobaric hemolysis, see Hemolysis and hemolysins.
Hypochlorites, decontamination, application to STOP system, exploratory studies, 10012
Hypothermia, use in exploration of space, possibilities and prospects, USSR study, 16768
Hypoxia:
 acute, regional lactic acid concentration in dogs, 1739
 chronic, in relation to altitude acclimatization, annotated bibliography, 17363
 Levy test, use in biomedical monitoring during dynamic stress testing, 7344
 oxygen deficit incurred, and relation to excess lactate, 7355
 physiologic changes due to hypoxic bed rest, effects of negative pressure, 7346
 rats trained to hypoxia, changes in erythrocytes, USSR study, 4985
Hyssong, Clara B., relief, 13371
Hysteresis:
 contact angle, effect of liquid structure, 9987
 loop method, use to study thixotropic suspensions, 10005, 11679

I

I am an American fighting man (Armed Forces), 1764
I & N reporter, 3405
I.C.O., see Interagency Committee on Oceanography.
I.L.O., see International Labor Organization.
I.R.S., see Internal Revenue Service.
I see a future, 17297
IAEA, see International Atomic Energy Agency.
IAGLO, see International Association of Governmental Labor Officials.
Iampietro, P. F., achievement of thermal balance and its maintenance during environmental stress, 1822
Iao Stream:
 Maui, Hawaii, engineer report—
 departmental edition, 13977
 document edition, 13559
IATA, see International Air Transport Association.
IAU, see International Astronomical Union.
Ibach, D. B., fertilizer use in United States, by crops and areas, 1964 estimates, 14760
Iberall, A. S.:
 anatomy and DC characteristics of arterial system with introduction to its AC characteristics, 11405
 1967 behavioral model of man, his chains revealed, 14401
ICAF, see Industrial College of Armed Forces.
ICAS, see Interdepartmental Committee for Atmospheric Sciences.
ICC, see Interstate Commerce Commission.
Ice:
 accumulation on open mesh metal panels, prevention, 8879
 aircraft icing, climatological probability, 7318

Ice—Continued
 anisotropic lake, ultrasonic pulse measurements, 1754
 bibliography, with abstracts, 14791
 central Yenisey River, spring ice jams, USSR study, 12724
 conditions, weather and crop bulletin (periodical), 4060
 creep of snow and ice, research report, 7380
 ice core from Greenland, stratigraphic analysis, 13290
 interface between ice and silicate surfaces, 11982
 measurement of natural particulate fallout onto high polar ice sheets, Antarctic and Greenland cores, 17374
 melting from below, natural convection, 7378
 melting problem with natural convection, study, 17376
 preventive compounds, military standard, 16471
 sheets, effect of basal water layer on dimensions, 4196
 surface movement on Tuto ramp in north Greenland, 11983
 see also Ice crystals—Sea ice
Ice breakers:
 program, Coast Guard authorization, 1968—
 hearings, 7752
 law, 13524
 reports, 10556, 12378
Ice cream, ices, etc., manufacture, automation of dairy plants, layouts and operating criteria, 1702
Ice crystals:
 formation, at low temperatures, 17375
 growth rates, studies, 6447
 nucleation and growth, 6442
Ice Harbor Dam, fish passage report, 13974
Icebreakers, see Ice breakers.
Iceland:
 air navigation services, joint financing agreement with other Governments, 7158
 Cenozoic pectinids, 11180
 declaration on provisional accession to GATT, 7151
 economy, basic data, 9016
 lights and fog signals, list, 8572
 change, 5335
 sailing directions, change, 14571
ICEM, see Intergovernmental Committee for European Migration.
Ichthyology, see Fish and fisheries.
ICITA, see International Cooperative Investigations of Tropical Atlantic.
ICO, see Interagency Committee on Oceanography.
Idaho:
 census of agriculture, 1964, State and county statistics, 10396
 census of business, 1963, retail trade, area statistics, errata, 10339
 census of manufactures, 1963, area statistics, 155
 census of mineral industries, 1963, area statistics, 4285
 climatological data, 3096
 county business patterns, 10344, 12047
 electric rate book, 9457
 ground water in American Falls Reservoir vicinity, 17832
 mineral industry, minerals yearbook chapter, 1400
 National Reactor Testing Station area, hydrology, 16690
 postal map, 15653
 potato, special survey, 5558
 precipitation data, hourly, 3401
 records, pamphlet to accompany microcopy relating to appointments, 1861-99, of Federal judges, etc., 18071

Idaho—Continued

- water supply outlook and snow surveys, 4046
 Ideas, packed for outdoor fun, Government publications, list, 11711
 Identical bidding in public procurement, 17883
 Identification:
 aircraft engine oil components, use of thin-layer chromatography (TLC), 11674
 chart system simplifies identification of complex design assemblies, 1458
 coding and application of hook up and lead wire, military standard, 12444
 item identification, supply cataloging manual, 16458
 manufacturers part and drawing numbering systems, 7847, 10886
 marking of—
 combat and tactical transport vehicles, 12443
 iron and steel products, Federal standard, 2269
 nickel and nickel base alloys, Federal standard, 16603
 symbols for iron and steel, nonferrous metals, and alloy products, Communist China, 6547
 system identification and pattern recognition, 9810
 Identifying bee diseases in apiary, 5624
 Ideology:
 and inflation implications of price and wage trends for national stabilization policies (remarks), 15249
 United States ideological offensive in winning cold war, hearings, 10623
 Idoceridae, catalogue, 12
 Idolatry, see Microlepidoptera.
 IER, see Institutes for Environmental Research.
 IES, see Institute for Earth Sciences.
 IFAK, see International Federation of Automatic Control.
 IFF radar (Identification, Friend-or-Foe), see Radar.
 IFR, see Instrument flight rules.
 Ignatius, Paul R., nomination, hearing, 15149
 Igneous rocks:
 Cenozoic volcanic rocks of Devils Postpile quadrangle, eastern Sierra Nevada, Calif., 14170
 Dry Mountain quadrangle, Jefferson County, Mont., geology, 2358
 Elkhorn Mountains, northern, Jefferson and Broadwater Counties, Mont., petrology, 2367
 volcanic rocks associated with Creede caldera, San Juan Mountains, Colo., 8166
 Igniters, igniting devices, classification definitions, 13043
 Ignition:
 coal dust and methane mixtures, equivalences and lower ignition limits, 9782
 incendivity of hot gases to methane and coal dust, reduction by sodium chloride and sodium nitrate, 11383
 toroidal ring prevents gas ignition at vent stack outlet, 9853
 Igoe, William B., application of Richardson's extrapolation to numerical evaluation of sonic-boom integrals, 6859
 Iguanid, see Lizards.
 IHD, see International Hydrological Decade.
 Igen, Lewis W., Tolland County, Conn., 7138
 Illicit practices affecting U.S. economic program in Vietnam (followup investigation), 14996
 Illinois:
 air pollution studies, 5438-42
 area measurement reports, 14816
 census of agriculture, 1964, State and county statistics, 10889

Illinois—Continued

- census of manufactures, 1963, area statistics, 1837
 census of mineral industries, 1963, area statistics, 4286
 climatological data, 3096
 congressional districts, 90th Congress, 1887
 county business patterns, 1660, 13370, 17425
 electric rate book, 15245
 fluorospar ore, selective flotation, 11382
 highway safety study, Operation 66, joint engineering-enforcement project report, 1594
 housing loans guaranteed by VA, potential savings by revising procedures relating to default, GAO, report, 11151
 labor laws relating to private-household workers, fact sheet, 10137
 mineral industry, minerals yearbook chapter, 6650
 precipitation data, hourly, 3401
 Illinois River, basins project for water pollution control, Lake Ontario program, 9501
 illness, see Sick.
 Illumination, see lights and lighting.
 Illusions (optical), see Optical illusion.
 Illustrators:
 examination announcement, 14864
 discontinuance notice, 14863
 illustrator draftsman—
 1 & C, Navy training course, 11656
 3 & 2, Navy training course, 13026
 ILO, see International Labor Organization.
 Image intensifiers, solid state, program for application to military training, final report, 5343
 Image interpreters:
 analysis of interpreter-computer reporting techniques, 7403
 catalog technique for measuring image quality, development and evaluation, 7406
 different viewing devices for photo interpretation, effectiveness, 10283
 map displays, chip versus hard copy, 4224
 reference and auxiliary information, organization and presentation, 4226
 team, use in information exchange, confidence, and resolving disagreements, 5752
 vertical and high oblique photographs, interpretation, 5750
 Image recognition, USSR, 9635
 Image sensors, see Sensors.
 Image tubes:
 design concept for improved photo-scan tube, 12891
 thermal neutron intensifier, provides brightly visible radiographic pattern, 17921
 Imagery, screening and overlapping, influence on speed and accuracy of photo interpretation, 14804
 IMCO, see Intergovernmental Maritime Consultative Organization.
 IMG, see Informational media guaranty program.
 Imlg, L. A., effect of initial loads, etc., on room-temperature fatigue life of Ti-5Al-1Mo-1V titanium-alloy sheet, 14464
 Imlay, Ralph W.:
 Mesozoic pelecypods Otapiria Marwick and Luperella Imlay, new genus, in United States, 8175
 Twin Creek limestone (Jurassic) in western interior of United States, 8168
 Immersion:
 effect on urine composition, 15896
 water immersion, effect on plasma volume and catecholamine response to tilting, 7345

INDEX 1967

- Immigration and emigration:
 - cooly trade laws, repeal, report, 7684
 - immigration and nationality act, amend—
 - hearings, 7750-51, 17606
 - law, 474
 - reports, 678, 688, 876
 - immigration inspection, what you should know at time of entry to U.S. after visit to Expo 67, 11213
 - investigation, authorization, reports, 4603, 9286
 - laws—
 - administrative decisions, index, 11212, 14193
 - general information, 1138
 - migration of talent and skills, some facts and figures on brain drain, 14681
 - national origins system for selection of U.S. immigrants, abolish, amend act, report, 14985
 - publications, price lists, 10040, 15672
 - scientists and engineers from abroad, recent trends, etc., 9966
 - scientists, engineers, and physicians, brain drain into United States, staff study, 15029
 - Immigration and Naturalization Service:
 - annual report, 11210
 - I & N reporter, 3405
 - immigration patrol inspector, examination announcement, 10435
 - interim decisions, 3425
 - officers, authority to make arrests, 15318
 - Immigration border patrol, *see* Border Patrol, Immigration and Naturalization Service.
 - Immobilization, calcium, phosphorus, and nitrogen mobilization resulting from conditions of inactivity in *Macaca irus* monkeys, 5707
 - see also* Rest.
 - Immunoelectrophoresis, use for study of antigen structure of helminths, USSR, 12664
 - Immunohematology, laboratory procedures, Army technical manual, 5745
 - Impact:
 - dynamic response to impact loadings of acceleration sensors having various mounting characteristics, 11521
 - high impact—
 - loading, temperature responsive valve withstands, 14427
 - pressure regulator withstands impacts of over 15,000 g., 16937
 - hypervelocity craters, in aluminum, projectile size effects, 14468
 - landing, motion of lunar-landing vehicle, procedure for computing, 18043
 - meteoroid hazards, effects, analytical study, 12855
 - of returning disabled Vietnam veteran with reference to rehabilitation, 18143
 - projectiles, initiation of condensed explosives, 14343
 - rail, testing on long travel shock mounts, 14805
 - solids colliding at high speeds, interaction, USSR study, 16744
 - Impedance:
 - input admittance of coaxial transmission line opening onto flat, dielectric-covered ground plane, 16993
 - mechanical analysis for lumped parameter multi-degree of freedom/multi-dimensional systems, 11489
 - Imperial Council of Ancient Arabic Order of Nobles of Mystic Shrine, *see* Ancient Arabic Order of Nobles of Mystic Shrine.
 - Imperial County, Calif., population, special census, 10372
 - Imperial National Wildlife Refuge, birds, list, 12547
 - Implements, utensils, etc.:
 - food utensils, etc., procedure for bacteriological examination, 17164
- Implements, utensils, etc.—Continued
 - hydrogen storage vessel on moon, thermal characteristics, 5259
 - Import Bank of Washington, Export, *see* Export-Import Bank of Washington.
 - Importers, and U.S. merchant marine, 12786
 - Imports:
 - by air, foreign trade reports, 3358
 - consumption and general imports, foreign trade report, 14836
 - detentions, food, drug, and cosmetic products, report, 3820
 - foreign trade—
 - airborne, summary reports, monthly, 3995
 - reports, 3351, 8956-59, 14836
 - summary reports, monthly, 4001-2, 4004, 4006
 - from low-wage areas, procedures to relieve domestic industries, etc., injured by, reports, 16242, 16256
 - general, foreign trade reports, monthly, 3353
 - impact on—
 - American industry and employment, procedures to relieve, hearings, 16323
 - American labor, hearings, 6034
 - quotas administered by Customs Bureau, etc., 9357
 - total trade, summary reports, monthly, 4004
 - trade by—
 - commodity, summary reports, monthly, 4001
 - country, summary reports, monthly, 4002
 - United States—
 - country of origin marking requirements for goods imported, 7842
 - trade with major world areas, 10460
 - Vietnam commercial commodity import program followup investigation, report, 14997
 - working day and seasonal adjustment factors and months for cyclical dominance (MCD), 4361
 - see also* Tariff—also names or classes of articles imported.
- Imprisonment, alternatives to incarceration, studies in delinquency, 10135
- Improving service to the public, agency action programs, 14865
- In defense of uselessness, address, 7900
- In-flight response to new non-gyroscopic blind flight instruments, 141
- In-tank shutoff valve is provided with maximum blast protection, 2645
- Incarceration, *see* Imprisonment.
- Incendivity, *see* Ignition.
- Incentive contracting guide, 16927
- Inclinators:
 - concrete block, building plan, 4124
 - incineration in cylindrical combustion chamber, experimental studies, 9763
 - teepee refuse burners, air pollution aspects, 1572
- Income:
 - commercial cotton farms, costs and returns, 1965, 956
 - consumer income—
 - of families and persons in United States, 4355
 - series, 4355, 16026
 - distribution in United States, 1983
 - families and persons, 1947-64, trends, 16035
 - family—
 - average, 16026
 - working wives, their contribution, 11914
 - farm—
 - better income for farmers, 11938
 - costs and returns—
 - commercial dairy farms, northeast and midwest, 16488
 - commercial egg-producing farms, New Jersey, 16489

Income—Continued

farm—continued
costs and returns—continued
commercial tobacco farms, Coastal Plain, North Carolina, 13943
commercial tobacco-livestock farms, Bluegrass area and Pennyroyal area, Ky.-Ten., 16490
income situation, 3261
increase through cooperative programs (address), 7257
new era farm programs (remarks), 15876
parity returns position of farmers, report, 13724
print as Senate document, report, 15100
teaching taxes program, 8221
imputed from owner-occupied housing, 7129
income and budget costs by family type, revised equivalence scale for estimating, 17900
income-loss protection against short-term sickness, 2386
limitations under VA pension and DIC programs, hearings on miscellaneous bills, 17613
low and moderate income families, new programs in health, education and welfare, 8193
low income—
better care for people, new title 19, medical assistance program, brief summary, 2228
families in Spanish-surname population of Southwest, characteristics, 9389
national income and product accounts, United States, 1929-65, statistical tables, 1829
productivity, prices, and incomes, study, 12190
railroads, selected items, 3865
status of OASDI beneficiaries with and without private pensions, 5514
tax returns statistics—
business, 6461, 9599
corporations, 15337
individual, 6460, 6462
1965, and 50-year historical summary, 14206
personal wealth estimated from estate tax returns, 15336
sales of capital assets reported on 1962 individual returns, 2411
see also subject from which income is derived.
Income tax:
administration, agreement with Viet-Nam, 15775
aged, revise tax treatment analysis of H.R. 5710, 6048, 16346
bank holding company act, income tax treatment of distributions pursuant to, reports, 659, 7692, 15093
Brazilian legislation, 12133
convention with France, 16351
corporations outside D.C. making loans secured by D.C. property, clarify status, report, 879
deductibility of accrued vacation pay, extend time, law, 406
deductions—
contributions to national and state political committees, amend internal revenue code, hearings, 16408
farmers, depreciable property, assessments for soil or water conservation or drainage districts, report, 7690
organizations contributions to, which are deductible, list, 12646
supplements, 3166
reserve for certain guaranteed debt obligations, law, 435
travel, entertainment and gift expenses, rules, 2410

Income tax—Continued

depreciation, investment credit, amortization, depletion, 4916
District of Columbia, increase, report, 672
donated property appraisals, procedure, 12651
double taxation, convention with—
Belgium, protocol, 2908
Brazil—
hearing, 17651
text, etc., 9185
Trinidad and Tobago, 6063
hearing, 17651
report, 17620
United Kingdom, agreement, 2921
employee pension annuity, profit sharing, stock bonus plans, etc., 9596
exemption for combat pay of commissioned officers, increase, law, 452
Federal tax returns, related forms and publications, description, 12647
guide for farmers, 1967 edition, 1142
increase (remarks), 17272
interest on refunds made within 45 days after filing of return—
law, 1970
reports, 2023, 2097
IRS looseleaf regulations system, 2406, 3525, 6455-56, 8218, 9597, 11220-221, 12649, 14202, 16723, 17851
opportunities for reducing costs on refunds attributable to net operating loss deductions, GAO report, 11149
reduction and revision, legislative history of H.R. 8363, 88th Congress, 756
reporting your tips for tax purposes, 2408
restoration of investment credit and accelerated depreciation allowance—
hearing, etc., 7764, 7804
law, 12168
legislative history, 13719
message from the President, 9063
reports, 7711, 7713, 9271, 10614
returns, filing directly with Internal Revenue Service centers—
law, 427
report, 902
returns statistics—
business, 6461, 9599
corporations, 15337
foreign tax credit claimed, 11224
farmers cooperatives, 2412
individual, 6460, 6462
1965, and 50-year historical summary, 14206
sales of capital assets reported on 1962 individual returns, 2411
senior citizens, tax reform, message from the President, 12198
supplementary convention with Canada, 4575
hearing, 17651
report, 17620
support test in case of children of divorced or separated parents—
law, 16134
reports, 2022, 2099, 7693, 15091
surcharges—
hearings, 17614
message from the President, 16154
suspensions of investment credit and accelerated depreciation—
hearings, 952
law, 504
summary, 4566
legislative history, 2064
report, 677
Senate amendments, summary, 4568
tax information for visitors to United States, 9800
teaching taxes program—
farm, 8221
general, 8220
teacher's guide, 1149
timber owner and his Federal income tax, 10161

INDEX 1967

Income tax—Continued

- treatment—
 - aged persons, revise, hearings, 7763, 10684
 - casualty losses attributable to major disasters, report, 7694
 - certain straddle transactions, report, 2024
 - exploration expenditures in case of mining, report, 650
 - treble damages under antitrust laws, make nondeductible, hearings, 7820
 - your Federal income tax for individuals, 2415

Inconel:

- alloy 718—
 - cryogenic fatigue data developed, 8472
 - materials data handbook, announcement, 17955

- Inconel X, high temperature vacuum fatigue testing with resonance-type machine, 11876

- Incremental procedure for solution of nonlinear problems with applications to plates and shells, 2727

- Incurvarilidae, *see* Moths.

- Indebtedness, *see* Debt.

- Indecent publications, *see* Obscene matter.

Indemnity:

- delayed delivery of registered mail, hearing, 9166
- milk payments to dairy farmers, extend—
 - law, 16140
 - reports, 14981, 15088

- Independence County, Ark., water resources, 14181

- Independence National Historical Park, Deshler-Morris House, general information, 6979

- Independence quadrangle, Calif., stratigraphy of Paleozoic formations, 2364

- Independent health insurance plans in U.S., 1965 survey, 2870

- Independent offices, *see* Government offices.

Index-digests:

- Civil Aeronautics Board, cumulative, economic cases, 8970
- Subversive Activities Control Board reports, 5563

- Index numbers, *see* subjects, e.g., Wages.

Indexes:

- AMC publications and blank forms, 95, 5721, 1025, 13289, 15927
- animal research in psychopharmacology, 7083
- armed services papers, 2041
- Atomic Energy Commission news release, 13312
- bibliography of medical translations, annual, 14526
- catalog of investment information and opportunities, 1150, 3079-80, 14208
- Civil Defense Office publications, 196, 7527, 16054
- code of Federal regulations, 12515
- Commerce Department publications, 1965 supplement, 4454
- compendium of shock wave data, 5793
- congressional committee hearings, Jan. 3, 1963-Jan. 3, 1967, 13472
- congressional record—
 - daily, 3132
 - 89th Cong., 1st sess., bound volume, 9029
- Court of Claims cases decided, v. 160-171, 970
- Defense Department, specifications and standards, 13920, 15188
- supplements, 3412
- Defense Supply Agency publications & forms, 3195
- design manual, cumulative, change, 2766
- diabetes literature, 3203
- cumulative edition, 14621
- digest of public bills and resolutions, 3206
- Federal register, 3313

Indexes—Continued

- Federal specifications and standards, 6335
- supplements, 3409
- Federal supply classification—
 - alphabetic index, supplements, 3323
 - numeric index, 3322
- Federal tax returns, forms, and publications, 12647
- Geniostoma, in New Hebrides, Fiji, Samoa, and Tonga, studies, 17048
- Government-wide Index to Federal research & development reports, 3381
- hearings—
 - NASA, 1968 authorization, 13714
 - population crisis, 16416
- Immigration and Naturalization Service, administrative decisions, 1212, 14193
- index-digest of Interior Dept. decisions, 3430
- index medicus, 3407
- cumulated, 6940
- internal security act, etc., administration, investigation, hearings and reports, 15168-169
- KWIC, Journal of Health Physics Society, 15694
- manuscript and revised printed opinions of Supreme Court in National Archives, 14512
- Maritime Administration, Maritime Subsidy Board, National Shipping Authority, current regulations, 11343
- medical and veterinary zoology, 15
- mental health evaluation, bibliographic index, 5421
- military periodicals, Air University Library, 3014
- Le Monde, 3411
- NASA management issuances, 11395, 15496
- NASA tech briefs, 11427, 16931
- National Institutes of Health library translations, 1966 supplement, 15700
- Naval Training Device Center publications, 2783
- Navy officer classifications manual, 7014
- nuclear science abstracts, 3647
- cumulative—
 - corporate authors, 12024
 - report number, with public availability citations, 7440
 - subjects, 15971
- nuclear science, conferences, 127
- Oak Ridge National Laboratory, master analytical manual, 7428
- OAR index of research results, 17342
- patents, 1966—
 - list of patentees, 11686
 - subjects of invention, 11687
- pesticides documentation bulletin (periodical), 3683
- photonuclear data, supplement, 17034
- plastics, technical conference papers, 17702
- President's papers—
 - Jackson, Andrew, 6623
 - series, 6623
- proceedings of National Museum, 14546
- progressive fish-culturist, cumulative subject and author index, 1081
- radiobiology bibliographies, 13343
- regulations published in Sbirka zakonů CSSR during 1966, Czechoslovakia, 15423
- renegotiation rulings and bulletins, 15721
- reports, Armed Services Committee, House, 4522
- Russian accessions, Library of Congress, 3575
- Russian drugs, 8534A
- scientific and technical aerospace reports, 3851
- Social Security Administration, 1966 research and statistics notes, 7121
- La Stampa and La Stampa sera, 3410

Indexes—Continued

technical conference papers on plastics, 981
 trademarks, 10021
 transport economics, monthly comment, 9605
 understanding the atom series, 17409
 United States code, 13473
 vegetative key to some common Arizona range grasses, 11141
 Veterans Administration publications, 2961, 17282
 water pollution control research and training grants, 1985 publications and reports, 11071
 weather stations, 17077
 Indexing:
 messages and documents, manual and automatic, evaluation, 4166
 technical thesaurus, manual for building, 4877
 water resources research and development, vocabulary, 2398
 Indexing (machine work):
 nonmagnetic, explosive actuated indexing device, 11496
 India:
 accessions list, Library of Congress American Libraries Book Procurement Center, New Delhi, 3416
 agricultural commodities, agreements, 1635, 2935, 7180, 11848, 11860
 cotton textiles, trade agreement, 8730
 economic development projects, planning and surveillance by AID, GAO report, 16669
 food to stave off threat of famine, proposal that U.S. join international effort to help, message from the President, 5996
 foreign trade regulations, 9014
 investment guarantees, agreement, 2909
 labor law and practice, 8300
 market factors, 17477
 mineral industry, minerals yearbook chapter, 8352
 power plants, Soviet studies, 6525
 relieve hunger victims, U.S. participation—
 hearings, 7792, 9138
 law, 9037
 reports, 7783, 9083, 9085
 sailing directions, west coast, 17073
 selling in India, 4438
 trade in cotton textiles, agreement, 8741, 13150
 U.S. travelers, you can assist U.S. balance of payments, 11887
 Indian Affairs Bureau:
 appropriations, 1968, hearings, 7734
 downdraft (periodical), 12834
 elementary teacher, examination announcement, discontinuance notice, 1921
 employment opportunities for elementary teachers, examination announcement, 1922
 field and central offices, directory, 8210
 Indian education, inquiry into transfer of responsibility to Education Office, 13879
 need to resolve differences in procedures used by Federal timber management agencies in appraising timber offered for sale, GAO report, 4871
 new series of publications about Indians from Florida to Alaska, announcement and order form, 14615
 press releases, 3736
 programs, briefing session, hearings, 10655
 progress report, 12685
 records, preliminary inventory, 14506
 Indian Arts and Crafts Board, fact sheets, 12639-640

Indian Claims Commission:

appropriations, 1968—
 hearings, 7734
 law, 12170
 reports, 10560, 10766
 termination date, extend, and expand membership—
 hearings, 6113, 10656
 law, 9039
 reports, 9096, 9110, 9267
 Indian Claims Commission for Alaska, appropriations, 1968, hearings, 9302
 Indian Health Division, pediatrics residency program, 1570
 Indian lands:
 heirship problems, amend law, report, 15116
 Interior Department decisions, 3426
 long-term leasing act—
 amend extending terms, etc., report, 15078
 amend rel. to—
 Gila River Reservation, report, 12243
 Hualapai Reservation, report, 12244
 San Carlos Apache Reservation, report, 12261
 see also names of Indian tribes or reservations
 Indian Ocean:
 atlas of interpolated values of depth, salinity, etc., 15624
 caligold copepods parasitic on sharks, 6958
 islands for defense purposes, availability, agreement with Great Britain, 11846
 lights and fog signals, list, changes, 5332, 9973, 14579
 notice to mariners, 3641
 portunid crabs, Smithsonian collections, 8540
 radio navigational aids, changes, 7006, 11647, 17075
 radio weather aids, changes, 2272, 8573, 11648, 17076
 south, sailing directions, change, 14575
 tide tables, 14875
 water masses, variability, 11630
 water, measurement of propagation velocity of elastic oscillations in surface layer, 36th cruise of USSR experimental ship Vityaz, 15353
 western—
 bathypelagic calanoid copepods, 8548
 seabirds, pelagic distribution, 14534
 Indian reservations:
 offenses, committed by Indians, amend U.S. Code, law, 421
 water supply of Indian reservations (series), 6409, 17829
 see also names of reservations
 Indian schools, title 1 activities under elementary and secondary education act, 12634
 Indiana:
 area measurement reports, 5810
 census of agriculture, 1964, State and county statistics, 12091
 census of manufactures, 1963, area statistics, 1838
 census of mineral industries, 1963, area statistics, 5826
 climatological data, 3096
 county business patterns, 1861, 13371
 electric rate book, 2249
 mineral industry, minerals yearbook chapter, 6651
 precipitation data, hourly, 3401
 Indiana Dunes National Lakeshore, establish, law, 12162
 Indiana University, mass spectrometer, duty-free entry, 7652, 14888, 16356
 Indianapolis, Ind., area wage survey, 8314
 Indians:
 adult vocational training, appropriations, increase report, 15079, 16283
 affairs, 1966, progress report, 12635
 Alaska, general information, 2389

INDEX 1967

Indians—Continued

- anthology of poetry and verse, 4911
 - appeals, Interior Department decisions, 3428
 - arts and crafts, sources, list—
 - individuals, 12640
 - organizations, 12639
 - children education, etc., study, authorization, report, 15137
 - code of Federal regulations, 11038
 - constitutional rights, hearings and investigations, summary report, 12414
 - dental health program, 11724
 - dental services—
 - 1966 annual report, 2810
 - 1967, annual report, 18159
 - dentist in Indian health, 8627
 - education of children, extend authority for allocation of funds—
 - hearings, 7742, 9153, 12419, 17664
 - reports, 9118, 10557
 - education, quality, organizational location in Education Office or Indian Affairs Bureau, 13879
 - Federal facilities, 1967 report, 10805
 - addendum, 10804
 - Florida to Alaska, new series of publications, announcement and order form, 14615
 - Fort McDermitt, grazing reserve—
 - law, 17552
 - report, 15112
 - good day at Rough Rock, giving education back to Indians, 9400
 - governing bodies of Indian groups under Federal supervision, list, 15321
 - Great Lakes area, general information, 2390
 - health and sanitation programs, briefing, hearings, 10655
 - health program—
 - Public Health Service—
 - nurses, examination announcement, 10436
 - discontinuance notice, 10423
 - reporter to the 1st Americans, 11761
 - Indian leader (Haskell Institute periodical), 3417
 - Indian School journal (periodical), 3418
 - Indian-State relations in their historical perspective (address), 15322
 - Industrial development, program, 2388
 - Lower Plateau States, general information, 6437
 - nursing careers among American Indians, 18184
 - offenses committed in Indian country, amend U.S. Code, law, 421
 - publications, price list, 15671
 - revolving loan fund, amend law, report, 642, 15116
 - services for Indians, 16517
 - VISTA serves American Indians, 6168
 - war on poverty, examination, hearings, 12420
 - see also names of reservations or tribes.
- ## Indicators:
- patent classification definitions, 17105
 - system provided complete data of engine cylinder pressure variation, 5200
- ## Indium:
- determination of lead in, 9985
 - in magnesium-base alloys, determination, 9985
- ## Individuality:
- naval training equipment and individual differences, study, 9980
 - whatever happened to the individual? (address), 10319
- ## Indonesia:
- accessions list, Library of Congress American Libraries Book Procurement Center, Djakarta, 3419
 - agricultural commodities, agreement, 5541, 7154

Indonesia—Continued

- agriculture, 9393
- Aldi's flight following Sept. 30 movement, 12679
- atomic energy, cooperation for civil uses, agreement, 7165
- background notes, 8708
- capsule facts for Armed Forces, 8874
- health information for travel, 13078
- military assistance for civic action program, agreement, 13154
- mineral industry, minerals yearbook chapter, 6652
- Inducers, pump, hubless, performance in water and liquid nitrogen, 6860
- Induction furnaces, tungsten insulated susceptor cup eliminates contamination, 5211
- Induction heating, see Heating.
- Inductors, RF inductor has higher Q, stable at higher temperatures, 9861
- Industrial accidents, see Accidents.
- Industrial arbitration, arbitration and N.L.R.B., 2d look (paper), 6937
- Industrial arts:
 - instruction, financial assistance guidelines under NDEA, 13956
 - national defense education act, institutes for advanced study, summer 1967, handbook for directors, 1003
 - secondary school, model spacecraft construction units, 2594
- Industrial College of Armed Forces:
 - catalog, 11240
 - correspondence courses—
 - management in Department of Defense, information booklet, 9607
 - offered on national security management, information booklet, 2422, 7863
 - correspondence school, program of studies, 9606
 - information manual, 6477
 - monograph series, 9608, 16731, 17858
 - National Security Seminar—
 - presentation outlines and reading lists, 2423, 15342
 - prospectus, 11241
 - perspectives in defense management (periodical), 12658
- Industrial diseases, see Occupational diseases.
- Industrial engineering technicians, examination announcement, 13445
- Industrial health, see Health.
- Industrial homework, see Home labor.
- Industrial hygiene, see Hygiene.
- Industrial instruments, exports, 1958-66, analysis, 15983
- Industrial machinery, see Machinery.
- Industrial management:
 - management aids for small manufacturers, 2854
 - methodological instructions for industrial enterprise change-over to new planning system, USSR study, 1169
- Industrial molasses, see Molasses.
- Industrial noise, guide to its evaluation and control, 17152
- Industrial plants, see Plants (Industrial).
- Industrial production, see Production.
- Industrial relations:
 - bibliography, Labor management relations act, 1947, as amended by Labor-management reporting and disclosure act, 11599
 - economic progress through improved labor-management relations (remarks), 5957
 - Industrial democracy, millions of ballots for, 6938
 - labor-management relations—
 - field examiner, career with National Labor Relations Board, 2748
 - paradoxes (remarks), 18088
 - selected readings and references, 11294
 - labor management reporting and disclosure act, summary of operations, 6598
 - lawyer's role (remarks), 14525

Industrial relations—Continued

national labor relations act, amend—
hearings, 728, 10648, 15025
report, 10576
publications, list, 3623
purchaser and labor contract, escalating
theory (address), 15596
Taft-Hartley act, 20 years after, major
developments (address), 9949
25 millionth vote, milestone in industrial
democracy (remarks), 6939, 8532
unfair labor practices, case developments,
report, 3799
Industrial safety, *see* Safety of life.
Industrial waste, *see* Waste products.
Industrial workers, *see* Labor.
Industries, *see* Industry—also names of
industries.

Industry:
air pollution, responsibility in controlling
(address), 8636

American—

funds for research and development,
1965, preliminary report, 5325
impact of imports, procedures to relieve,
hearings, 16323
standard industrial classification (SIC)
used by Census Bureau system
(address), 181

America's industrial manpower require-
ments, 1964-75, study, 6603
and education cooperate in scientific re-
search, USSR, 8251

are planning and regulation replacing
competition in new industrial state?
16438

Atlantic industrial community looks to the
future (remarks), 10451

basic research, applied research, and de-
velopment in industry, 1964 survey,
final report, 2761

Bulgaria, industrialization over 2 decades
reviewed, 15424

classification manual, 8922

Continental Shelf, industrial research
problems, USSR study, 8278

current industrial reports, 3169-70, 3540,
4322-47, 5853-76, 7478-82, 8938-48,
10352-359, 12067-83, 13586-397,
14825-830, 15900-16007, 17429-437
announcement and order form, 4325,
8948

cybernetics in industry, USSR study, 6537
defense industry bulletin (periodical),
3193

descriptions, 14817

economic and technical information on
typical industries, guide, 15341

electronic and precision equipment, East
European, translations, 3955

impact of pollution abatement regulations
(address), 1580

Indian industrial development, program,
2388

industrial characteristics of workers, af-
filiations by age, race, class of work,
etc., census of population, 13403

Industrial outlook, 1828

Industrial work, levels of illumination for
various kinds, student references, 9751

Industry and universities strengthen co-
laboration, USSR study, 6559

Industry reports, 3092, 3139, 3147, 3150,
3588, 3770, 3788

Interindustry labor mobility in United
States, 13119

Interindustry relationships, potential de-
mand, etc. 1970 projections, 2508

machinery industries, East European,
translations, 3956

memorandum to industry, civil defense
movie, announcement, 10407

meteorologists in service, Hungarian,
12717

new patterns of Industry-Government
partnership in coming decade, (ad-
dress), 4429

Industry—Continued

nonagricultural, employment, hours and
earnings, measurement, 16825

Ozarks, rural industrialization case study,
17711

plans for progress program, 11298
Post Office challenge, 10028

premium pay provisions for weekend
work, 5057

profiles, 14813

basic economic and technical data, etc.,
accession notice, 11229

reference materials, establishing and using,
USSR study, 1346

safety in industry—
instructor outline—

accident investigations and records,
8291

construction safety, site clearing,
17387

consultative approach for safety pro-
motion, 16797

fire and explosion prevention and pro-
tection, 8295

handling materials safely, 9681

housekeeping for safety, 6599

illumination for safety, 8296

job hazard analysis, 14280

personal protective equipment, 8298

planning layout and arrangement for
safety, 8292

preventive maintenance for safety,
8293

promoting worker interest in safety,
8288

responsibility for safety, 8287

safe working surfaces, 8294

safety inspection procedures, 8290

safety organization, 8289

use of color for safety, 8297

marine safety data for shipyards,
shipboard ventilation for hazardous
atmospheres, 8299

State-local taxation and industrial loca-
tion, interrelationship, 15823

travel attraction for tourists (remarks),
1959

TVA area, development, 14706

USSR development, translations—
automotive and tractor industry, 4015

chemical industry and machinery, 4016

construction, construction machinery,
and building materials, 4017

electric power, power machinery, and
electrical equipment, 4018

electronics and precision equipment,
4019

metallurgy and minerals, 4020

metalworking equipment, 4021

precision equipment, 4022

USSR light, economic reforms, results,
5009

USSR, translations—
current developments, 4013

general information, 4014

wage and union scale studies, 1955-66,
directory, 5072

wage survey—
communications, 6604

fertilizer manufacturing, 12774

hospitals, 15448

Industrial chemicals, 2502

laundry and cleaning services, 14298

motion picture theaters, 11330

synthetic fibers, 8317

women's and misses' dresses, 6613

wool textiles, 15446

see also Manufactures and manufac-
turers—
also names of industries.

Industry manpower surveys, 17729

Inelastic electron scattering, *see* Scattering.

Inert gases, *see* Noble gases.

Inertia, moments of, *see* Moments of inertia.

INDEX 1967

Inertial guidance:
 alignment of inertial systems on moving base, 16976
 sensor testing, limitations produced by test platform vibrations, 1492
Inertial navigation, see Navigation.
Inertial systems, see Inertial guidance.
Infant feeding, see Infants.
Infantry, your career, 5731
Infants:
 casefinding, developmental approach, with reference to cerebral palsy, mental retardation, and related disorders, 10403
 community infant formula services, minimum sanitary standards, 15698
 mortality in—
 Norway, problems, 17167
 Scotland, 5466
 United States, and 6 West European countries, international comparison, 8650
 parents and babies, note to agents, 4764
 rescue breathing, general information, 5461
Infection:
 control, environmental aspects of hospitals, 8635
 infectious process, pathogenesis, experimental therapy, USSR studies, 6573
 tumor and infectious virus interaction, quantitative aspects, USSR study, 6580
 infectious anemia, *see* Anemia.
 infectious diseases, *see* Contagion and contagious diseases.
 infestation characteristics of balsam woolly aphid in Pacific Northwest, 4852
Inflammable materials:
 flammability—
 in unusual atmospheres, materials in hyperbaric atmosphere containing oxygen, nitrogen, and/or helium, preliminary studies, 11675
 properties of hydrocarbon fuels, 17094
 plywood surface effect of panel thickness and noncombustible inserts, 8064
Inflation, passive geodetic satellite inflation rate study, 8426
Inflation (finance):
 ideology and inflation, implications of price and wage trends for national stabilization policies (remarks), 15249
 restoration of investment credit and accelerated depreciation allowance—
 hearings, etc., 7764, 7804
 law, 12168
 legislative history, 13719
 message from the President, 9063
 reports, 7711, 7713, 9271, 10614
 suspensions of investment credit and accelerated depreciation—
 hearings, 952, 7764
 law, 504
 summary, 4566
 legislative history, 2064
 report, 677
 Senate amendments, summary, 4568
Influenza, health information series, 7068
Informacion sobre jornales, 8845
Information:
 scientific and technical information (USSR periodical), 3852
see Public information.
 information and the nervous system, 14250
 information bulletins, *see* names of departments, etc., issuing bulletins.
 Information Center on Nuclear Data, bulletins, 5763, 12000
Information centers, see Information services.
 information input and fixation in human memory during natural sleep, 11285
 Information Office, Agriculture Dept.:
 appropriations, 1968, hearings, 10629, 12397
 congressional list (series), 8206

Information services:
 Atomic Energy Commission, specialized information centers, directory, 1814
 FAA handbook, 10979
 federally assisted programs, study system to aid in participation, hearings, 4639
 information center for electrical equipment, USSR, 15377
 library and information science research program, 7901
 public welfare agencies, 10134
 resources in U.S., directory, Federal Government, 15458
 scientific and technical—
 information dissemination, national and international developments, 3853
 reference materials, establishing and using in research, design, and industrial operations, 1346
 USSR, Leningrad Information Bureau, services for technical progress, 6513
Information storage and retrieval systems:
 analysis of interpreter-computer reporting techniques, 7403
 Army scientific & technical information program, 13306
 automated address coding guide and data retrieval series, 16028
 coding and keypunching, geological information form for core, grab, and dredge samples, instructions manual, 6997
 colleges and universities, systems for measuring and reporting resources and activities, 17058
 criminal intelligence data system, annual report to Congress, require, reports, 13670, 13685
 data retrieval system provides unlimited hardware design information, 11484
 documentation sponsored by NSF, price list, 6916
 evaluation of user reactions to prototype on-line information retrieval system, 17945
 image interpreter reference and auxiliary information, 4226
 Labor Statistics Bureau system, search statement manual, 15436
 master control data handling program uses automatic data input, 16940
 message retrieval systems, manual and automatic, laboratory evaluation, 4166
 move the information, kind of missionary spirit, trends, in processing and education, 14766
 National Institute of Neurological Diseases and Blindness, neurological information network, 15699
 needed, international system for evaluated compressed scientific and technical knowledge (address), 10467
 nonconventional scientific and technical information systems in current use, descriptions, 11623
 problems of Soviet science, 2427
 request oriented information selection program, 8506
 scientific and technical information, single and united system construction, USSR study, 9646, 9675
 scientific information retrieval system for research grants, Radiological Health Division, 7064
 solid system compression, numeric and alphanumeric, 14519
 SPAD formatter, buffer interface between satellite prediction computer and display, 8593
 urban planning information system, 11207
 weather forecasting, human processing of information, 8862
Information theory:
 cybernetics in service of Communism, USSR studies, 12742
 physico-chemical modeling of information processes, USSR study, 1272

Information theory—Continued
 problems of information transmission (USSR periodical), 3772
 quantum effects in information transmission systems, 18057
 relationship of entropy and quantity of information, USSR study, 14247
 Informational media guaranty program: financing—
 hearing, 10834
 report, 10767
 Infrared Acquisition and Tracking System, Apollo aircraft, infrared equipped for re-entry tracking, navigation accuracy, 1507
 Infrared beamsplitters, *see* Beamsplitters.
 Infrared lamps, brooding chicks, 15837
 Infrared rays:
 absorption of intense bands of H_2O , D_2O and CS_2 , measurements, 1550
 airborne infrared mapper as tool for detecting and measuring fires, 8106
 atmospheric transmission, from 2–5 microns for slant paths from 35,000 ft. to upper limit of atmosphere, survey, 12931
 detector, use of twin helix system to produce fast scan, 6800
 flux from air to underlying surface, 2972
 handbook of military technology, 8584
 horizon definition, state-of-the-art report, 8416
 horizon profiles from meteorological data inputs, synthesis of 15u bans, 9801
 horizon radiance profile variations over range of meteorological, geographical, and seasonal conditions, 8418
 IR vidicon scanner monitors many test points, 15545
 outgoing infrared radiance from planetary atmosphere, theoretical computations, 14457
 passive infrared acquisition and tracking system analysis, 5177
 reflectances of metals at cryogenic temperatures, 6922
 spectrometric techniques and spectral-structure correlations, 6631
 Infrared spectral transmissions, *see* Transmittances.
 Infrared spectrophotometry, *see* Spectrophotometry.
 Infrared spectroscopy, *see* Spectroscopy.
 Infrared spectrum, *see* Spectra.
 Ingots, *see* names of metals.
 Ingram, William Marcus, biological field investigative data for water pollution surveys, 1073
 Inhalation, anesthetization of small laboratory animals, apparatus, USSR study, 1288
 Inheritance and transfer tax:
 career opportunities, estate tax examiner, 2404
 IRS looseleaf regulations system, 3526
 returns, estimate of personal wealth, 15336
 Inheritance (biology), *see* Heredity.
 Inhibition, aromatic L-amino acid decarboxylase by decarborane, 14775
 Inhibitors, organophosphorus, anticholinesterase activity, determination, USSR study, 1168
 Inhomogeneous gases, *see* Gases.
 Iniskin-Tuxedni region, Alaska, geology, 8163
 Injections:
 and suction in equilibrium dissociating air, stagnation-point boundary layer, 8499
 gaseous-film cooling of rocket motor, 6882
 Injectors, M-1 engine subscale, tests, 12959
 Injuries:
 acute conditions, incidence and associated disability, July 1965–June 1966, in U.S., 14637
 coal mines, monthly report, 3098
 conference on trauma, report, 7087
 firearms, etc., mandatory reporting in D.C., provide law, 480

Injuries—Continued
 fuel industries, minerals yearbook chapter, 2536
 injury potentials of light-aircraft instrument panels, 1820
 metal and nonmetal industries, minerals yearbook chapter, 8338
 metallic mineral industries, 1961–63, injury experience, 11355
 mineral industries—
 minerals yearbook chapter, 2537
 work injury experience, 8342, 15465
 nonmetallic mineral industries, 1961–63 experience, 9756
 oil and gas industry, 16851
 rates—
 how to compute, 9701
 manufacturing industries, 3422
 recording employee injuries, 9714, 16805
 work injuries—
 and accident causes in school lunchrooms, 14282
 and work injury rates, heavy construction industry, 17890
 concrete brick and block industry, 16813
see also Accidents—Employers' liability and workmen's compensation.
 Ink, Dwight, remarks, Sept. 18, 1967, 17842
 Inland waterways:
 inland seas, what will happen to them, USSR study, 8244
 rules concerning sailing vessels, etc., law, 468
 Inlets, *see* Air inlets (aircraft).
 Inman, Robert M.:
 heat-transfer analysis for liquid-metal flow in rectangular channels with heat sources in fluid, 6883
 theoretical investigation of turbulent liquid-metal heat transfer in channels with heat sources in fluid, 1499
 Inner space, sea of opportunity, 6186
 Inner tubes:
 automotive, savings through use of formal advertising in contracting by GSA, GAO report, 9557
 excise tax, impose at manufacturer-owned retail outlet—
 law, 360
 report, 2094
 Federal item identification guides for supply cataloging, supplements, 3285
 pneumatic tire, Federal item identification guide, 15185
 Innovations, technological, *see* Technological innovations.
 Inoculation, legume, what it is, what it does, 14739
 Inorganic compounds:
 current industrial reports, 3169
 foam fractionation of inorganic solutions, 12642
 technical grade, military standards—
 aluminum ammonium sulfate through barium peroxide, 15193
 strontium nitrate through zinc oxide, 15194
 Inouye, F. T., application of alloy 718 in M-1 engine components, 12862
 Input admittance of rectangular waveguide-fed aperture antenna radiating into inhomogeneous lossy dielectric slab, 18028
 Input-output analysis, *see* Linear programming.
 Input-output table of social product, USSR, 1239
 Insect pests, *see* Insects.
 Insect repellents, materials evaluated at Orlando and Gainesville, Fla., 14736
 Insect traps:
 blacklight traps, development for European chafer surveys, 7303
 electric, large-scale field evaluation to reduce bollworm populations in Reeves County, Tex., 11915

INDEX 1967

Insect traps—Continued
wasps and bees, trap-nesting, life histories, etc., 8685

Insecticides:

aerial application, I.-V., problems, 17410
candidate materials evaluated, Brownsville, Tex., 13196
effectiveness, Soviet experimentation, 4978
insect control on crops, livestock, etc., suggested guide, 10162
materials evaluated at Orlando and Gainesville, Fla., 14736
residues on forage crops, results of analyses, 8803
see also Dusts and dusting—*also* names of insecticides.

Insects:

affecting sweetpotatoes, 15837
collection and preservation, 10182
control—
farm stored wheat, 4112
flowers, 17307
home vegetable garden, 10171
pecans, 1679
strawberry, 10167
cooperative economic insect report, 3148
damage to—
corn at harvest time and in farm storage in 3 southeastern States, 14751
shelled corn in small bins, evaluation of malathion, synergized pyrethrum and diatomaceous earth as protectants, 34
western forests, aerial photographic techniques for estimating, 14078
destructive Alaska forest insects, identification, 14085
disease carriers, 11730
evaluation of malathion, synergized pyrethrum, and diatomaceous earth as protectants against insects in sorghum grain, in small bins, 11933
finding hidden insects, student or classroom science project, 4135
forest, conditions in—
Pacific Northwest, 8053
United States, 9528
impact in northern hardwoods type, 2304
inert dusts as protectants for wheat in small bins, evaluation, 8835
injurious, in eastern United States, protecting log cabins, rustic work and unseasoned wood from attack, 5627
insect enemies, find and report, 10191
intercepted plant pests, list, 7250
m-nolayers for evaporation control of water, effect on insects, 7102
outbreaks in Oregon and Washington, 2291, 17797
publications, price list, 5416
quarantine notices under Plant quarantine act, P.P.C. series, 3667
trapping with light, student or classroom science project, 4136
two new sucking insect pests of seed in southern pine seed orchards, 15283
vascular plant associational studies, bibliography, 8804

Insolation, limits initial establishment of western larch seedlings, 14088

Inspection (Industrial):

how to inspect charts—
bag sewing operations, 9688
bench and floor stand grinder, 9686
cupola, 9689
demolition operations, 9693
HTIC LS series, 9684-95, 11308
effective use suggestions, 11307
radial saw, 9685
scaffold construction (light duty), 9690
table saw, 9687
textile industry, weaving, 9691
tractor loader, 9684
tubular steel frame scaffold, 9694
tubular steel tube & clamp scaffolding, 9695

Inspection (Industrial)—Continued

how to inspect charts—continued
vencer lathe, 11308
wood shaper, 9692
inspecting for safety, 16803
occupational safety aid, 9702
see also names of articles, etc., inspected,
Inspection (military):
interagency ground inspection manual, 16559
machinery, piping and pressure vessels for ships of Navy, military standard, 2154
sampling inspection guide, quality and reliability handbook, 10902
see also Military supplies.
Inspection services:
Agriculture Dept., user charges, authorize, hearing, 15146
U.S. Government, directory, 14048
Inspector General, Agriculture Dept., appropriations, 1968, hearings, 10629, 12397
Inspectors:
agricultural, outfit foreign pests, 4138
FDA inspectors, career information, 11094
plant quarantine—
and plant pest control, examination announcement, 211
examination announcement amendment, 12100
poultry, handbook, 13889
see also types of inspectors.
Installations (military):
administrative facilities, Navy Dept. design manual, 17065
Air Force, communications-electronics activities, commercial services, manual, 4164
airfield and heliport pavement evaluation concepts, emergency construction, 7392
Army—
continental U.S., list, 14795
facilities, basic criteria and construction standards, technical manual, 10270
change, 4213
Army and Air Force, water supply and treatment, technical manual, 109
Army National Guard program, operating procedures, 6935
civil post offices, adequacy, 16338
construction appropriations, 1967—
law, 457
supplemental—
hearings, 7799
law, 9035
reports, 6087, 7665, 7667, 7673
construction appropriations, 1968, hearings, 13695, 15016, 16305, 16395, 17637
construction authorization, 1967, report, 623
construction authorization, 1968—
law, 17555
reports, 13684, 13688, 16284, 16371
courier station design, technical manual, 13301
defense disposal manual, changes, 6146, 7853
disposal of U.S. installations in France, report, 7769
drainage for areas other than airfields, emergency construction, Army technical manual, 111
emergency construction roads, streets, walks, and open storage areas, general provisions and geometric design, technical manual, 5742
engineering weather data for heating and air conditioning design, etc., Army, Navy, and Air Force manual, 11947
family housing occupants, telephone service, methods used to provide, Defense Dept., GAO review, 6383
homeowners losses incident to closing, assistance—
authorization, 1967—
hearings, 7796, 9147
reports, 9277, 10564, 10572

Installations (military)—Continued
homeowners losses incident to closing,
assistance—continued
authorization, 1968—
hearings, 13695, 16395
law, 17555
reports, 13684, 13688, 16284, 16371
land operational facilities, Navy design
manual, 14565
manpower utilization in Far East and
Western Europe, report, 9133
military fields, instrument approach, pro-
cedure charts, 3555
NATO common infrastructure program,
U.S. participation, investigation, report,
2034
naval, relief of civilian employees, errone-
ously in receipt of wages, report, 4581
naval shore facilities, definitive designs,
15619-620
procedures manual for resource manage-
ment, 7384
ration breakdown point operations, tech-
nical manual, 15948
signal construction battalion, field manual,
4205
United States—
disposal in France, report, 6109
located in France, investment of mili-
tary assistance funds, 9158
Walter Reed Army Medical Center, con-
struction authorization—
law, 458
report, 919
Installations (naval), see Installations
(military).
Installment credit:
auto loan characteristics at major sales
finance companies, 7992
automobile instalment credit develop-
ments, 1960-66—
seasonally adjusted data, 7994
seasonally unadjusted data, 7995
automobile instalment credit developments
(periodical), 7993
commercial banks, holdings, monthly re-
port, 3142
consumer credit—
at consumer finance companies, 3141
monthly release, 3140
consumer, slowdown, etc., 7997
finance charges, require full disclosure and
set maximum rates, hearings, 17594
revolving credit provisions of truth in
lending, hearing, 12402
Installment credit, see Installment credit.
Institute for Applied Technology Institute:
annual reports, 9943, 18079
programs and organization, 12986
Institute for Basic Standards annual reports,
9943, 18079
Institute for Earth Sciences, ESSA technical
reports, IER-IES series, 16533
Institute for Materials Research annual re-
ports, 9943, 18079
Institute for Oceanography, programs and
mission, 16537
Institute for Telecommunication Sciences
and Aeronomy:
ESSA technical memorandum, IERTM-
ITSA series, 7935
ESSA technical reports, IER-ITSA series,
2223-25, 4748, 6223-25
ionospheric predictions (periodical), 3446
Institute of Food Technologists, 25th annual
meeting, Kansas City, Mo., 1783
Institute of Oceanology, USSR, 20th an-
niversary, 9622
Institutes for Environmental Research:
ESSA technical memorandums—
IERTM-ATDL series, 9427
IERTM-ITSA series, 7935
IERTM-NSSL series, 6220-22, 10964-
966, 15231, 16532

Institutes for Environmental Research—Con.
ESSA technical reports—
IER-IES series, 16533
IER-ITSA series, 2223-25, 4748, 6223-
25
Institutional assistance grant program,
spring 1967, 16502
Institutions:
eastern and midwestern, milk consump-
tion and food service patterns, 11935
eligible under National vocational student
loan insurance act of 1965—
list, 2181
supplement, 6181
for aged and chronically ill, charges for
care, 17169
investment of institutional funds in FHA
insured mortgages, 12626
USSR—
educational institutions, development,
1227
scientific research institute, cost ac-
counting, 16786
see also Child welfare institutions—
Mental institutions.
Instruction, see Education—
Programmed instruction.
Instructors, see Military Academy, West
Point—Teachers.
Instrument approach procedure charts, see
Maps and charts.
Instrument flight rules:
aviation, air traffic patterns, 17740
simulated IFR conditions, exposure of
men to intermittent photic stimulation,
5802
Instrument flying:
attitude, Army technical manual, change,
1767
handbook, 2284
pilot examination guide, 6358
supersonic transport departures, pictorial
navigation display, simulator study,
12944
Instrument landing, see Landing (aircraft).
Instrument panels, see Panels and paneling.
Instrumentation:
analytical chemistry, survey, 16933
determining courses of study, 1017
developments, symposium, 17163
for high energy physics, 1966 international
conference, proceedings, 7419
instrumentation and normal values, bio-
medical monitoring during dynamic
stress testing, 7343
Journal of research, National Bureau of
Standards, 3460
nearshore environment, by multipurpose
data acquisition system, 16322
pressure testing of instrumentation fit-
tings portable fixture facilities, 11458
radiochemical analysis, 2746
reactor control systems based on counting
and Campbell techniques, develop-
ment program, 7422
research of TVA Engineering Laboratory,
17260
structures, Project Pre-Gondola, 17396
Instruments:
and laboratory equipment, Federal item
identification guides for supply catalog-
ing, supplements, 3289
building (USSR periodical), 3451
direction reference and three-axis attitude,
has only one moving part, 6806
electrical, shipments, 1960-65, analysis,
1826
Instrument automatically selects peak ac-
celeration signal from several accelerom-
eters, 1459
low cost instrument to measure tempera-
ture or resistance accurately, 11127
marine research, methods, USSR study,
6501
panel, and control devices for automotive
vehicles, Federal standard, 6317

INDEX 1967

Instruments—Continued

selected instruments and related products, 1965, current industrial reports, 5872
see also names and types of instruments.

Insulation:

ceramic, and insulating materials, properties, USSR study, 10755
 cryogenic, inexpensive replacement for vacuum jacketed line, 16877
 cut-through tester accurately measures insulation failure rates, 17966
 electrical insulators, classification definitions, 18128
 multilayer systems for temperature to 700° K, performance, 17943
 panel thickness and noncombustible inserts effect on surface flammability of plywood, 8064
 Teflon insulated wire, technique for stripping, 8471
 tester automatically checks insulation of conductors in cables, 14369
 thermal—
 conductivity probes for insulations, 4201
 cryogenic application, 17953
 Federal item identification guide, 13917
 wire—
 and cable, current industrial reports, 5865
 mechanical properties automatically determined, 17981
see also Heat shields—Soundproofing.

Insulators:

electrical, Federal item identification guide, 17695
 thermocouple-flexible cable connector insulator is highly reliable, 8403

Insurance:

Canal Zone annual business report, 12032
 contracts for medical care, recovery of excess funds accumulated, GAO review, 8145
 facts for farmers, 11928
 provide protection where reasonable rates not now available, hearing, 16402
 riots or other civil disorders, insurance availability, hearing, 16402
see also Reinsurance—also types of insurance.

Insurance companies, *see* Life insurance companies.

Insured banks, *see* Banks and banking.

Insured loans, *see* Mortgages.

Insured savings, *see* Banks and banking.

Insurgency, Communist infrastructure in South Vietnam, organization and strategy, 13298

Integral equations, *see* Equations.

Integrals:

invariants—
 non-existence, new methods of celestial mechanics, 9921
 periodic solutions of 2d type, new methods of celestial mechanics, 11561
 tungsten resonance absorption, determination by activation, 18012
 Integrated circuits, *see* Circuits.

Integration (mathematics):

abscissas and weights for Gaussian quadrature, 5284
 control equations and problem of small time constants, 8505
 numerical—
 differential equations, engineering exposed, 1503
 methods for computing gas flow in chemical nonequilibrium, 15568
 ordinary differential equations, finite difference methods, operations unification, 11559
 self-starting procedure simplifies, 6745
see also Mathematics.
 Integrators, easily set and reset with electronic switch, 11464

Intellectuals:

ferment in Soviet Union, aspects, 4571
 USSR, aspects of intellectual ferment, study, print additional copies, report, 2098
 Intelligence (military science), *see* Military intelligence.
 Intelligence Operations Committee, Senate, create, report, 2090
 Intensity measurements of some fundamental absorption bands of H₂O, D₂O, and CS₂, 1550
 Intensity of sound, *see* Sound.
 Interaction effects of control jet exhausting radially from nose of ogive-cylinder body at transonic speeds, 5237
 Interaction of solids colliding at high speeds, USSR, 16744
 Interagency Boards of U.S. Civil Service Examiners, directory, 14860
 Interagency Committee on Oceanography: ICO informal report, 2241
 ICO pamphlet series, 1042, 7956-57, 8682, 17752-753
 Interagency training programs, *see* Government officials and employees.
 Inter-American Development Bank: appropriations, 1967, law, 405
 appropriations, 1968, hearings, 15014
 executive directors, election, modification, special report, 13552
 participation, U.S.—
 annual report, 12200
 increase—
 hearings, 10640, 10832
 law, 17542
 reports, 10607, 13675, 15102, 16244, 16252
 special report, 13552
 role in Latin American agricultural development (remarks), 10121
 social progress trust fund agreement, protocol, 2913
 Inter-American republics, *see* American republics.
 Interdepartmental Committee for Atmospheric Sciences, ICAS report, 9450
 Interdepartmental Committee on Status of Women, annual report, 15323
 Interest (psychology):
 interest check list, instructions for administering and using, 16516
 Interest and usury:
 adjust deposit accounts of enlisted members for lost interest—
 law, 451
 reports, 686, 932
 banking markets and interest rates, evidence on concentration in, 14040
 compound interest tables for long-term planning in forestry, 13212
 cost effects of commercial bank underwriting of municipal revenue bonds, 16592
 debentures, Federal intermediate credit banks, delete interest rate limitation—
 hearing, 707
 report, 632
 Government economic policy (remarks), 5574
 insured banks paid on savings, maximum interest rates, regulation, extend act—
 hearings, 17595
 law, 17541
 report, 13816
 insured banks, temporary ceilings, report, 648
 interest rates—
 ceilings and future of residential financing (remarks), 7999
 in capital markets, 6299
 on business loans, revision in quarterly survey, 11059

JANUARY-DECEMBER

Interest and usury—Continued

interest rates—continued
savings competition, and bank profitability (address), 11050
interest rates versus interest ceilings in allocation of credit flows (remarks), 4786
loans to World War I veterans upon security of adjusted-service certificates, cancel unpaid interest—
law, 449
report, 918
OASDI trust funds give additional interest earnings, provision of 1960, amendments, 7116
payment of interest on deposits, Federal reserve regulation Q, 6301
Interest equalization tax act :
extend—
digest of testimony and statements—
9176
hearings, 6047, 13859
law, 13589
legislative histories of P.L. 90-59 and P.L. 89-243, 15052
reports, 7070, 7708, 13689, 13823
Interest rates, see Interest and usury.
Interfases :
dynamics of cryogenic liquid experiments in orbit, 2608
interfacial behavior following termination of outflow in weightlessness, 8501
liquid, mass transfer through, mechanism, 8215
SPAD formatter, buffer interface between satellite prediction computer and display, 8593
Interferometers, sound speed by iterative reflection-interferometry, 9983
Interferon, formation in animal organism, characteristics, USSR study, 4989
Intergovernmental Affairs Council, National, see National Intergovernmental Affairs Council.
Intergovernmental Committee for European Migration, observations, findings, and recommendations, report, 14984
Intergovernmental Maritime Consultative Organization :
convention, amendments, text, 13725, 17233
3d extraordinary session, report of congressional delegation, 16234
Intergovernmental relations :
Census Bureau's program on Federal statistics for planning needs of State and local governments (paper), 10383
condition of American federalism, historian's view, 4638
elementary and secondary education act, administrative relationships, hearings, 17664
Federal role in urban affairs, hearings, 2117, 4640, 6111, 9316, 10841, 13865, 15157, 16412-413
print additional copies, reports, 10789, 13650
Federal system as seen by Federal aid officials, results of questionnaire, print additional copies, reports, 4597, 10585
Improving cooperation in management of Federal assistance programs, hearings, 4639, 13864
Intergovernmental cooperation act of 1965, hearings, 735
Intergovernmental cooperation act of 1967, hearings, 13864
Intergovernmental manpower act of 1967, hearings, 12409
Intergovernmental personnel act of 1967, hearings, 12409
Interlocal agreements and contracts handbook, information report, 8801

Intergovernmental relations—Continued

metropolitan America, challenge to federalism, study by Advisory Commission on Intergovernmental Relations, 2048
print additional copies, report, 10590, 10785
revenue sharing and its alternatives, what future for fiscal federalism?—
articles, 13546
hearings, 16149
study, authorization, report, 6074
urban development intergovernmental awards program, 14187
Intergovernmental Relations, Advisory Commission on, see Advisory Commission on Intergovernmental Relations.
Intergular metal phase increases thermal shock resistance of ceramic coating, 6811
Interindustry economics, see Linear programming.
Interindustry labor mobility in United States, 13119
Interior and Insular Affairs Committee, House :
accomplishments, 89th Congress, 4545
calendar, 3473
committee print, 4545
hearings, 2050-52, 4546, 7749, 9162, 10655-658, 12302-303, 13708, 15037-40, 17604
Investigations and studies—
authorization, report, 6018
expenses, report, 7719
reports, 530, 625, 656, 642, 649, 2015, 4494, 4503, 7702, 7734, 7731, 9096, 9113-15, 9135, 10524-528, 10561, 10578-579, 12243-244, 12247, 12261, 262, 12268, 12278, 13627, 13632, 13671, 13679, 14932, 14935, 14950, 14962, 14967, 14970, 14977, 14985, 15002-7, 16165, 16226, 16233, 16237-240, 16243, 16283, 16286, 16288-289
rules, 6039
Interior and Insular Affairs Committee, Senate :
calendar, 3497
committee print, 2124
hearings, 2123, 4643-44, 6113, 7811-15, 9318-23, 10851-855, 12410-413, 13868-870, 15160-164, 16417-418, 17624, 17656-657
Investigations and studies, authorization, report, 4623
reports, 783, 873, 875, 880, 881, 912-913, 2085, 4613, 6075, 7777-80, 9263-67, 9269, 9273, 10704, 10733-735, 10737-740, 10750-753, 10790, 12324, 12328, 12361-362, 12375, 13826-830, 13832, 13835-836, 15074, 15078-79, 15081, 15094, 15097, 15109, 15111-120, 15122-123, 15134, 17627, 17629-631
Interior Department :
America's department of natural resources, activities, etc., 2391
appropriations, 1967—
law, 403
supplemental, hearings, 2040
appropriations, 1968—
budget amendment, 10515
hearings, 7734, 9143, 9302, 16393
law, 12170
reports, 10560, 10766, 12252, 13678
code of Federal regulations, 12527
cooperative water resources, research and training, report, 6438
decisions, 3428
bound volume, 17845
contract appeals, 3427
index-digest, quarterly, 3430
Indian appeals, 3428
land appeals, 3429
develop production of fish protein concentrate, law, 415
investigate feasibility of water resource development proposals, reports, 2015, 12362, 16240

INDEX 1967

Interior Department—Continued
lands administered, classify for disposal or interim management under multiple use principles, law, implement, hearing, 10853
Library, list of accessions, 3509
management analyst development program, 9586
Missouri River Basin, progress, quarterly report, 3777
mobilization programs, hearing, 14918
nuclear power-desalting project, authorize—
hearings, 7749, 7813
law, 10487
reports, 6078, 7731, 9125
nuclear power-desalting project in cooperation with AEC, authorize—
law, 375
report, 675
policies, programs, and activities, hearings, 10955
press releases, 3737
research contracts, authority to enter into—
law, 390
report, 880
role as it involves petroleum industry (remarks), 8208
saline water research and development progress reports, 1140, 2393-96, 4915, 6440-51, 8211-16, 9588-94, 11217-218, 12641-645, 14196-200, 15326-833, 16718, 17848-849
scientific programs, hearing, 17657
study control of jellyfish and other such pests—
hearing, 6435
law, 434
report, 671
subjects, publications list, 7051
telephone directory, 17850
Under Secretary, nominations—
Black, David S., hearing, 15161
Luce, Charles F., hearing, 4644
Interlaboratory Technical Advisory Committee, report, routine surveillance of radioactivity around nuclear facilities, 7065
Interlocking directorates:
commercial banks and interlocks among financial institutions, control staff report, 15018
communications carriers, applications, FCC rules and regulations, 3279
Intermediate credit banks, see **Federal intermediate credit banks**.
Intermountain Forest and Range Experiment Station:
publications, list, 9532
publications on genetics and breeding of forest trees, 1921-65, bibliography, 4827
Intermountain region:
Forest Service, yearbook, national forests in profile, 15280
iron and steel scrap, processing and marketing, 16855
national forest ski areas, Americas winter playground, 6372
vascular plants, checklist, 14125
Internal combustion engines, see **Engines**.
Internal Compton effect, 1430
Internal revenue:
act of 1962, legislative history of H.R. 10650, 4564, 7760
act of 1964, legislative history of H.R. 8363, 756
code of Federal regulations, 6281-82, 6293-94, 7979-81, 7988, 8222, 9464-67, 11039-40, 11225
code of 1954, amend—
hearings, 6047, 7763, 10684, 16408
laws, 360, 435, 452, 513, 1970, 16129, 16134
legislative history of H.R. 10650, 87th Congress, 4564, 7760

Internal revenue—Continued
code of 1954, amend—continued
reports, 702, 2022-2024, 2027, 2094, 2097, 2099, 7690, 7693, 7698, 9088, 9091, 15091-92
Senate amendments, summary, 4567
code of 1958, amend, law, 406
customs decisions, weekly report, 3977
internal revenue bulletin, 3431
index-digest quarterly system, 16722
semiannual cumulative, 1144, 12648
procedure and administration, IRS, loose-leaf regulations system, 1146, 4918, 6458, 12650, 14203-204, 15335, 17852
refunds and credits of taxes, report, 9057
see also names of certain taxes, e.g. Excise taxes.
Internal revenue agents, examination announcements, 16067, 16069
Internal Revenue Service:
abuses by agents, charges, hearings, 15015
career and sense of purpose, 2399
career opportunities—
digital computer systems trainee, 6454
estate tax examiners, 2404
internal auditor, 2405
international taxation, 8217
programmers, 6459
revenue agent, 1147
revenue officer, 2409
secretarial, in Washington, D.C., 11223
tax law specialist, 6463
tax technician, 1148
tax work, 2400
circulars, 2401-2
efforts against organized crime, hearings, 13706
excise tax exemption on beer and tobacco products for certain consumers, GAO review, 9554
executive selection and development program, 1141, 9595
income tax returns, file directly to service centers—
law, 427
report, 902
looseleaf regulations system—
employment tax, 2407, 3527, 6457, 9598
estate and gift tax, 3526
excise taxes, 1145, 3528, 4917, 8219, 11222, 15334
income tax, 2406, 3525, 6455-56, 8218, 9597, 11220-221, 12649, 14202, 16723, 17851
procedure and administration, 1146, 3529, 4918, 6458, 12650, 14203-204, 15335, 17852
opportunities for increasing revenues by improving controls etc., relating to interest paid on Federal income tax refunds, GAO report, 2344
opportunities for reducing costs on refunds attributable to net operating loss deductions, GAO report, 11149
principal Federal tax returns, related forms, and publications, description, 12647
procedures, 12651-652, 14205
report, 1969
departmental edition, 2403
document edition, 2011
travel, entertainment and gift expenses, rules for deducting from income tax, 2410
Internal Revenue Taxation Joint Committee:
estimates of Federal receipts, 10686
Federal excise tax data, 10687
summary of—
act temporarily suspending investment credit and limiting use of accelerated depreciation, 4566
foreign investors tax act, 9177
Senate amendments to H.R. 13103, Foreign Investors Tax Act of 1966
Presidential election campaign fund act, etc., 4567

Internal Revenue Taxation Joint Committee—Continued

summary of—continued
Senate amendments to H.R. 17607, suspensions of investment credit and accelerated depreciation, 4568

Internal security, *see* National security.

Internal structure and physics of earth, 9920
International affairs, *see* International relations.

International Affairs Institute, establish, hearings, 9156

International agreements:

in force, list, 7194
treaties and other international agreements, 14691

see also subjects, names of countries, etc.
International agricultural development, monthly newsletter to cooperators, 3432

International Agricultural Development Service:

annual summary, International agricultural development, 6464
appropriations, 1968, hearings, 10629, 12397

International Air Transport Association, role in growth and development of air transportation throughout world (remarks), 1900

International aspects of antitrust, hearings, 7818, 13874

International Association of Chiefs of Police, highway safety study, Operation 66, joint engineering-enforcement project report, 1594

International Association of Governmental Labor Officials, 1968 convention proceedings, 11301

International Association of Machinists and Aerospace Workers, emergency board report, 13966

International Astronomical Union, IAU system of astronomical constants into Astronomical ephemeris and into American ephemeris and nautical almanac, 6995

International Atomic Energy Agency:

application of safeguards to cooperation, agreement with—
Argentina, 2893
Australia, 7160
Israel, 5533
South Africa, 17240
Spain, 8736

promise of IAEA (remarks), 15972
U.S. participation, 1963, report, 5528

International Bank for Reconstruction and Development, participation of U.S., annual report, 12200

International Biological Program, hearings, 17612

International boundary studies, 1630-33, 2883, 8718, 11829, 17224-225

International Brotherhood of Electrical Workers, emergency board report, 13966

International cataloging, Federal manual for supply cataloging, 4669

International Center for Advanced Study in Health Sciences, building, etc., construction, appropriations, 1968, amendments, 10517

International Center for National Capital, 11594

International Civil Aviation Organization, financing air navigation services in Iceland, agreement, 7158

International claims settlement act, *see* Claims.

International commerce (periodical), 3434 supplements, 2417, 17853

International Commerce Bureau:
foreign market reports service, listing, 12653

International business publications, checklist, 6467, 15339

International Commerce Bureau—Continued

Paris Air Show—
news fillers, 8225
newsletter, 8226
press releases, 3738

International Convention for Conservation of Atlantic Tunas, report, 6064

International Convention for Prevention of Pollution of Sea by Oil, amendments, implementing, hearings, 745

International Convention on Safety of Life at Sea, amendments to 1960 convention—report, 7773
text, 6062

International cooperation:
geodetic operations in U.S. and in other areas, report, 14873
programs advancing status of women, reports of U.S. Government agencies, 8793

International Cooperative Investigations of Tropical Atlantic, Equalant III, data report, 8569

International Cotton Institute, *see* International Institute for Cotton.

International Council for Exploration of Sea, convention, report, 6064

International Criminal Police Organization, participation of U.S., amend law, report, 13680

International Development Agency:

AID story, U.S. economic aid program, 6468
biographic register, 14670
Deputy Administrator, nomination of Rutherford M. Poats, hearing, 9312
development of cooperative enterprises under foreign assistance act of 1961, report, 13700
economic development projects in India, planning and surveillance, GAO report, 16669
field staff, Foreign Service list, 3349

food donated for distribution abroad, problems in processing claims against voluntary relief agencies for loss or misuse, GAO report, 12589

food donation programs administered by nonprofit organizations, audit extent, GAO report, 8149

operations report, 3659
press releases, 3739

procurement regulations, 2994, 17855-856
projects in Colombia, planning and supervision, GAO review, 16677

proposed foreign aid program, 1968, summary presentation to Congress, 11230
reorganization, message from the President, 6000

retirees, prospective, general information for, 8721
specific risk investment guaranty handbook, 4925

telephone directory, 15764
transportation costs for food donated for overseas distribution, GAO review, 9550

United States agencies in Vietnam, audit and inspection programs, 1966, GAO review, 9553

Vietnam commercial import program, management and operation, GAO review, 15302

Vietnam, improper practices, commodity import program, U.S. foreign aid, hearings, 10844

International Development Association:
appropriations, 1967, law, 405
appropriations, 1968, hearings, 15014
participation of U.S., annual report, 12200

International education, *see* Education.

International Educational and Cultural Affairs, Advisory Commission on, *see* Advisory Commission on International Educational and Cultural Affairs.

INDEX 1967

- International exchange:
 - educational and cultural exchange-of-persons program, 4080-81, 14678
 - educational, opening decades 1946-66, history, accomplishments, etc., 4819
 - teacher exchange program, 13958
 - see also Government publications—also subjects.
- International Federation of Automatic Control, 3d Congress, 2431
- International Finance Corporation, participation of U.S., annual report, 12200
- International Human Rights Year, U.S. observance, report, 12586
- International Hydrographic Bureau, convention, message from President of United States, 17618
- International Hydrographic Organization, establish, message from President of United States, 17618
- International Hydrological Decade, program, crucial importance of water in man's future, 6396
- International Institute for Cotton agreement, 8738
- International labor (periodical), 3436
- International Labor Affairs Bureau activities, outline, 6470
- International Labor Conference, 49th conventions adopted and recommendations, 16160
- International Labor Organization:
 - conference in Geneva—
 - appoint delegates to attend, report, 10604
 - recommendation concerning role of co-operatives, text, 13564
 - conventions adopted and recommendations, 16160
 - recommendation, employment of women with family responsibilities, 5990
 - recommendations, and convention adopted at conference, withdrawal of treaty, text, 15064
- International law:
 - economic relations and rule of law (remarks), 10120
 - studies, 11683
- International Law, Private, Hague Conference on, see Hague Conference on Private International Law.
- International Monetary and Financial Policies, National Advisory Council on, see National Advisory Council on International Monetary and Financial Policies.
- International Monetary Fund:
 - facility based on special drawing rights, outline plan, hearing, 17563
 - outline plan (remarks), 17271
 - participation of U.S., annual report, 12200
- International notams, 3437, 9445
- International organization and conference series, 5528-30, 8719-20, 11830, 14679, 18232
- International organizations:
 - headquarters, acquisition of property by D.C. government for sites, report, 7701
 - private participation in international activities, promote, hearings, 9156
 - public exempt from District of Columbia unemployment compensation act, amend, report, 16293
 - services for disabled, through international cooperation (remarks), 11705
 - U.S. contributions, 518
 - U.S. missions, field staffs, Foreign Service list, 3349
- International Paper Company, Southern Kraft Division, wage chronology, 8315
- International policy, see International relations.
- International postal service:
 - directory of international mail, 3211, 10027
 - international mail, general information, 14608
- International Quiet Sun Year, 1964-65, weekly synoptic analyses, 5-, 2- and 0.4-MB. surfaces for 1964, data from Meteorological Rocket Network, 10968
- International relations:
 - arms sales and foreign policy, study, 6098
 - Atlantic alliance—
 - current views, 10838
 - unfinished business, 6108
 - changing American attitudes toward foreign policy, hearing, 6100
 - code of Federal regulations, 7978
 - conflicts between U.S. capabilities and foreign commitments, hearing, 6102
 - control of local conflict, design study, 15924
 - defense commitments of U.S. (statement), 1628
 - diplomatic relations act of 1967—
 - hearing, 10831
 - report, 12387
 - East-West relations—
 - constructive initiatives (address), 10099
 - recent developments, hearing, 4533
 - foreign affairs research, Governmental resources, directory, 17221
 - foreign aid, essential element of U.S. foreign policy (address), 18231
 - foreign policy briefs, 3348
 - foreign policy of U.S.—
 - American foreign policy, current documents, 8705, 17211
 - Investigation—
 - authorization, reports, 4627, 7663
 - expenses, reports, 639, 7725
 - State Department bulletin, 3198
 - foreign relations of U.S., diplomatic papers—
 - China, 1944 —
 - departmental edition, 13140
 - document edition, 12192
 - general, 1944—
 - departmental edition, 5527, 13139
 - document edition, 4464, 12191
 - general, United Nations, 1945—
 - departmental edition, 18230
 - document edition, 17595
 - foreign relations of U.S., publications, price list, 7054
 - foreign trade—
 - future of U.S. policy—
 - hearings, 16146
 - subcommittee report, 16147
 - issues and objectives of U.S. policy, statements, compendium, 16148
 - general foreign policy series, 1628-29, 2881-82, 7146-47, 14676, 18231
 - German foreign policy documents, 3d Reich, 1st phase, 1625
 - government, universities, and international affairs, crisis in identity, report, 10516
 - how foreign policy is made, 2881
 - idea of amelioration (address), 9011
 - implications of change for United States foreign policy (remarks), 14676
 - in search of peace, basic goals of United States foreign policy, motion picture announcement, 7149
 - International information and cultural series, 7150, 14678, 17226
 - Kennedy Round, foreign policy aspects—
 - hearings, 730, 10650
 - subcommittee report, 10651
 - Latin America, United States operations, review, 7770
 - legislation on foreign relations, collection, 6106
 - military security and foreign relations, regulations, Engineers Corps, 6206
 - modern communications and foreign policy, report, 10623
 - new man for new age in world affairs (remarks), 18243

International relations—Continued
opportunities and risks of financing world progress (remarks), 7210
phases in USSR foreign policy, 1279
power and responsibility (address), 5530
science, foreign affairs, and State Department (address), 14671
science, government, and international policy, Panel on Science and Technology, 8th meeting—
papers, 12315
proceedings, 9170
Soviet-Arab contradictions in their relations with Israel, 14241
strategic importance of Western Europe, 5614
United States and the world, introduction to our foreign relations, color filmstrip, teacher's manual, 5553
United States commitments to foreign powers hearings, 17652
United States-European relations, study and reevaluation, hearings, 13863
United States policy in Near East crisis, 14680
United States should substantially reduce its foreign policy commitments, national high school debate topic, 2002
United States-South African, hearings, print additional copies, report, 13655
USSR, faithfulness to international obligations, 14267
USSR international economic relations, translations, 4024
Vienna convention on diplomatic relations act of 1967, report, 12387
Vietnam, shipping policy review, hearings, 743
winning cold war, U.S. ideological offensive, hearings, 10623
world affairs overall viewpoint (address), 7902
worldwide military commitments, hearings, 944, 10816
International Research Group on Refuse Disposal, information bulletins, 2827
International science notes (periodical), 3439
International Statistical Programs Office, series ISPO 1, 182, 1855, 4360, 5898-99, 7496, 10387
International sugar agreement of 1958, protocol, prolongation, text, 2885, 9186
International Symposium on Nucleolus, participants and addresses, 7074
International Systems Research, Center for, see Center for International Systems Research.
International trade, see Commerce.
International Whaling Commission, convention, amendments to schedules, 7161
International wheat agreement, extension protocol, 17246
Interns, see Dentists.—Physicians.
Interoceanic Canal Study Commission, see Atlantic-Pacific Interoceanic Canal Study Commission.
Interparliamentary Group, Canada-United States, see Canada-United States Interparliamentary Group.
Interparliamentary Group, Mexico-United States, see Mexico-United States Interparliamentary Group.
Interplanetary dust outer ionosphere and its transition to interplanetary medium, USSR study, 6535
Interplanetary medium, see Interplanetary dust.
Interplanetary vehicles, see Spacecraft.
Interpolation tables of folded sin x/x coefficients, 4413
Interpretation (law), see Law.
Interpretation of Mandan culture history, 11973, 12193
Interpretative bulletins, Wage and Hour and Public Contracts Divisions, 11897, 13178

Interstate agreements:
Arizona-California boundary compact, consent of Congress, report, 4499
bus taxation proration, Massachusetts, consent of Congress—
law, 440
Great Lakes basin, consent to compact, hearings, 731
oil and gas compact, consent of Congress to extend—
hearing, 15042
report, 10737
report of Attorney General, 15431
personnel training, authorize compacts, hearings, 12409
Washington Metropolitan Area Transit Authority compact, approval—
hearing, 2132
law, 478
report, 654
Interstate and Foreign Commerce Committee, House:
activities, 89th Congress, 2d session, 4515
calendar, 3479
committee print, 4547
hearings, 2053, 9163, 10659-660, 12304-305, 13709-710, 15041-43, 17605
investigations and studies—
authorization, report, 6022
expenses, report, 7727
reports, 680, 2035, 4515, 9112, 9136, 10567, 12259, 13665, 14971, 14980, 16230
Interstate commerce, see Commerce.
Interstate commerce act, see Carriers—Railroads.
Interstate Commerce Commission:
appropriations, 1967, proposal, 10699
appropriations, 1968—
hearings, 9145, 15147
reports, 10600, 15131
commissioners, nominations—
Hardin, Dale W., hearing, 15153
Syphers, Grant E., hearing, 15153
decisions (bound reports), 2421, 6474, 14210, 16727, 17857
decisions (separates)—
finance, 3440
motor carrier, 3441
motor carrier finance, 3442
traffic, 3443
report, 1965, errata, 2420
report, 1966—
departmental edition, 6471
document edition, 5981
transfer—
law, 389
report, 906
Interstate Commission on Potomac River Basin:
appropriations, 1967, law, 491
appropriations, 1968—
hearings, 9144
report, 13678
Interstate compacts, see Interstate agreements.
Interstate Conference on Labor Statistics, proceedings of 24th conference, 15454
Interviewing:
guides for specific disabilities, 10944
interview data on chronic conditions compared with information derived from medical records, 11762
progress interview, helps for management in counseling people about their work, 6373
Intestinal flora:
effect of diet and atmosphere—
experimental data, 9799
literature survey, 2613
Intestines, tumors, pathology, 15181
Intoxicants, see Liquors.
Intoxication, see Drunkenness—also names of poisons.
Intra-aortic blood pressure, see Blood pressure.

INDEX 1967

Intraoceanal Waterway:

- Gulf, Gulf County Canal, Fla., modification, engineer report—
departmental edition, 2209
document edition, 1995
- Gulf section, New Orleans, La., to Port Arthur, Tex., etc., navigation maps, 8383
- Gulf, transportation lines, 2219
- Inulin, stability in frozen plasma using automated technic, 4185
- Invariants, see Integrals.

Inventions:

- Index of patents, 1966, subjects, 11687
- products list circular, new products development for small business, 3775

Inventories:

- accounting system for aeronautical equipment, Navy Dept., GAO review, 16676
- control, cooperative grain elevators, 15235
- department store, price indexes, 6614
- executive inventory, questions and answers for executives, 10419
- Government-owned property in U.S., Territories, etc., 4540
- green coffee, 3384
- livestock and poultry, 5682, 7198
- manufacturers—
current industrial reports, 3540
1963 census, 4275
value, annual survey of manufactures, 7454
- National Oceanographic Data Center, archived data, Arctic and Antarctic supplement, 6996
- plant, material received by New Crops Research Branch, 8810, 15828
- preliminary inventories series, 14506-510, 18074
- real property—
leased to U.S. throughout world, 11160
owned by U.S. throughout world, 1966, report, 6386
- road inventory manual of instructions, guide, 17177
- shortleaf pine seedling methods on broadcast-seeded areas, 8072
- size, determined by computer program, 2641
- tuna and swordfish, exploratory longline fishing efforts and catch rates in northwestern Atlantic, 14063
- turkeys, 13158

- Inverters, static, 3-phase single-way, power circuits for optimum stepped-wave output, 10008

- Investigators, CSC career opportunity, 207
see also Criminal Investigators.

Investment companies:

- act of 1940—
amend, hearings, 15152
SEC releases, 3445
- growth, public policy implications, report, 2035
- mutual fund legislation of 1967, hearings, 15152
- small business—
examination function of SBA, GAO review, 16675
Investigation, hearings, 10845
program of SBA, report, 4509
program, review, hearings, 2062
- small business investment act—
amendments of 1966—
law, 483
report, 4588
amendments of 1967—
hearings, 10820, 15020
law, 17549
reports, 12391, 14961, 14982, 16261
text and related tax matters, 9330
- Investment for tomorrow, report of Presidential Task Force on Career Advancement, 7046
- Investment in poor people, 5044

Investments:

- catalog of investment information and opportunities, index, 1150, 14208
- deletion notices, 3079
- supplement notices, 3080
- credit carrybacks, income tax, amend law, report, 15093
- direct, voluntary program, status and prospects (remarks), 5964, 7585
- disputes, settlement, convention, 2922
- implement, report, 2093
- District of Columbia, legal investments for trust funds, list, 6157, 15201
- forestry, long-term, computer program for evaluating, 14131
- guaranties, agreement with—
British Guiana, 2887
Cameroon, 11868
Ghana, 10104
India, 2909
Lesotho, 11865
Malta, 8748
Paraguay, 7187
Philippines, 5544
Zambia, 2933
- international funds in FHA insured mortgages, 12626
- international encouragement, convention with Trinidad and Tobago—
hearing, 17651
reports, 6063, 17620
- investment advisors act of 1940—
amend, hearings, 15152
rules and regulations, 8677
SEC releases, 3444
- investment credit, income tax information, 4916
- nonfarm mortgages, life insurance companies, 15241
- overseas, aids to business, 1152
- quick refunds of investment credit carryback—
law, 1970
reports, 2023, 2097
- restoration of investment credit and accelerated depreciation allowance—
hearings, etc., 7764, 7804
law, 12168
- legislative history, 13719
- message from the President, 9063
- reports, 7711, 7713, 9271, 10614
- specific risk investment guaranty handbook, 4925
- suspension of investment credit, etc.—
hearings, 952
law, 504
summary, 4566
- legislative history, 2064
report, 677
- Senate amendments, summary, 4568
- trade and investment in developing countries, report, 9026
- United States investment of military assistance funds in military installations located in France, 9158
- voluntary program for direct investments, status and prospects (remarks), 5964
- Investors:
foreign investors tax act of 1966—
House bill and suggested technical amendments, summary, 2114
law, 513
legislative history, 7762
report, 702
Senate amendments, summary, 4567
summary, 9177
- Inyo County, Calif.:
Birch Creek, travertine depositing stream, physical and chemical description, 8171
convey land to estate of Gwilym L. Morris, etc., 4494
- Independence quadrangle, stratigraphy of Paleozoic formations, 2364
- Ioanes, Raymond A., talk, Nov. 14, 1966, 4818

Iodides, content in oilfield brines in some Tertiary and Cretaceous formations in Mississippi and Alabama, 11385
 Iodine, use for reducing static electricity of polymers, 14411
 Iodine isotopes, iodine-131 concentration in aqueous samples determined by ion exchange, 12833
 Ion chambers, see Ionization chambers.
 Ion cyclotron wave generation in uniform and nonuniform plasma including electron inertia effects, 12962
 Ion exchange:
 determines iodine-131 concentration in aqueous samples, 12833
 membranes, inorganic, application to electrodialysis, 8214
 structure and transport of polystyrenesulfonate model membranes, 9592
 technology, Soviet research, 8254
 Ion exchangers, characteristics, USSR study, 9644
 Ion plating, see Plating.
 Ion thrusters:
 electron-bombardment—
 beam, measurement of ion and electron densities, 5244
 dynamic characteristics, 18033
 onset of anomalous diffusion, 2710
 mercury electron bombardment—
 accelerator grid durability tests, 14462
 cathode durability tests, 12960
 oxide-cathode durability, 6867
 Ionite, USSR studies, 12749
 Ionization:
 concerning use of highly ionized plasma to create a laser, USSR study, 4998
 contact, of cesium, use porous ionizers, status, 11540
 photoionization detector, improved soft X-ray, 9838
 potentials, role of ligand molecules, research, 9588
 probability of iron particles at meteoric velocities, 11406
 surface ionization on glowing metals, theory, 11568
 Ionization chambers, ion chambers simplify absolute intensity measurements in vacuum ultraviolet, 1447
 Ionization gases:
 Bayard-Alpert, variations in gage constant, emission current function, 6863
 hot-cathode magnetron, 5185
 orbitron, low pressure application, study, 16909
 performance characteristics, survey, 5290
 small volume, ultrahigh vacuum system, studies, 18037
 Ionized gases, see Gases.
 Ionizers, porous, for contact ionization of cesium, status, 11540
 Ionizing radiation:
 applied spectrometry, main problems, 123
 biological effects, bibliography, indexes, 13343
 effects on concentration of amino compounds in rat plasma, 5714
 exposed workers, assistance to States for recordkeeping, hearings, 1974
 maximum permissible levels, USSR study, 11286
 mechanism of action of AET, protection of DNA against ionizing radiation by GED, 5713
 mutagenic activity of chemical compounds and genetic effect, USSR studies, 2438
 powerful tool of scientific research, Bulgarian study, 4940
 pulsed, effects on primate equilibrium function, 7354
 State legislation and regulations involving, 7093
 substrate protection of enolase and lactic dehydrogenase against mechanism, studies, 14774

Ionosphere:
 disturbances, principles of predicting, USSR manual, 14237
 earth cavity, thin shell model, resonances, 2225
 earth-ionosphere waveguide channel, propagation of long and superlong radio waves, USSR excerpt, 17873
 electron densities and scale heights recorded at Hawaii, 6736
 electron density and scale heights over American continents, 2617
 summary graphs, 16930
 F2 layer, diurnal variation, influence of earth's magnetic field, 5312
 Gemini experiment D-14, dual-channel, VHF-UHF transmitter, 10004
 Gemini VHF-UHF polarization experiment D-14, antennas, 10009
 high frequency ionospheric telecommunications systems, statistical performance indexes, predicting, 2223
 ionospheric mapping by numerical methods, advances, erratum, 8526
 ionospheric perturbations (periodical), 3446
 lunar, detection, results of experiments made on 1st lunar artificial satellite, USSR study, 4950
 outer, and its transition to interplanetary medium, USSR study, 6335
 planetary, investigation, 12847
 polar cap, cooperative study, agreement with Canada, 17248
 Ions:
 cation effect on solubilization by oil-soluble sulfonates and applicability of mass law, 17095
 electrode, use in measurement of serum ionic calcium, 13271
 hydrated multivalent cations, new class of molten salt mixtures, 9794
 improved ion sources, 9817
 ion-microprobe sputter source, mass spectrometer analysis of solid materials, 5178
 ionic conductivity of calcium and strontium fluorides, 6866
 magnetic fields, use to produce ionic concentration gradients, 9589
 transport in biological systems, model membrane studies, 6443
 volume production costs in tenuous plasmas, 15577
 see also Ions by name, e.g., Magnesium.
 Iowa:
 area measurement report, 5811
 census of agriculture, 1964, State and county statistics, 16392
 census of manufactures, 1963, area statistics, 156
 census of mineral industries, 1963, area statistics, 5827
 climate, 9425
 climatological data, 3096
 county business patterns, 1862, 13372
 electric rate book, 14028
 mineral industry, minerals yearbook, chapter, 2554
 postal map, 15654
 precipitation data, hourly, 3401
 southwestern, landscape evolution and soil formation, 14763
 western, promising conifers, 8107
 Iowa County, Iowa, soil survey, 14657
 Iowa Indians, Iowa Tribes of Kansas and Nebraska and of Oklahoma, judgment funds, disposition, report, 16238
 Ipswich River and Valley, water resources of basin, 6411
 IQSY, see International Quiet Sun Year, 1964-65.
 IR, see Infrared rays.
 Iran:
 agricultural commodities, agreement, 6737
 atomic energy, cooperation for civil uses agreement, 10103

INDEX 1967

Iran—Continued
 attacks oil consortium, 4972
 background notes, 1616
 capsule facts for Armed Forces, 11980
 establishing business in, 13467
 foreign trade regulations, 17474
 mineral industry, minerals yearbook chapter, 8353
 press information report, 3702

Iraq:
 agricultural commodities, agreement, 11844
 capsule facts for Armed Forces, 13280
 Communist movement, 14261
 southwestern, geology, 6407

IRATS, *see* Infrared Acquisition and Tracking System

Irazu Volcano, ash eruptions, debris flow and erosion control problems, 16686

Ireland:
 economy, basic data, 5955
 mineral industry, minerals yearbook chapter, 12802

IRGRD, *see* International Research Group on Refuse Disposal

Iribe, P., extravehicular protection and operations, study, 12859

Iridium:
 electrodeposition from fused sodium cyanide and aqueous electrolytes, 16865
 sliding friction, 15578

Irigoyen, Ramon G., relief, 12351

Iris diaphragm, diode-iris controlled waveguide slot radiators, feasibility study, 9812

Irkutsk, Russian SFSR, new Soviet academic settlement, 9637

Iron:
 and steel, minerals yearbook chapter, 2544
 and steel scrap—
 intermountain and northwestern Plains States, processing and marketing, 16855
 Southeast, sources, consumption, etc., 12797
 chromium alloys, preparation, 5364
 cobalt alloy—
 magnetically soft, high-temperature, investigation, 1500
 with superior high temperature magnetic properties, 5209
 compounds, chemical shift in Mossbauer spectroscopy standard, 15588
 diffusion barrier in thermally regenerative galvanic cell, 12843
 foundries, current industrial reports, 4329
 gage of 6.5% Si-Fe sheet is chemically reduced, 2624
 heat treatment and properties, 2739
 identification symbols, Communist China, 6547
 industry, water requirements, 12617
 Lake Superior resources, 6678
 Michigan-Wisconsin formations, samples and metallurgical evaluation, 6678

ore—
 deposits, Wyoming, description, etc., 6104
 developing thermochemical model for blast furnace, measurement of rate coefficient for reduction of iron ore pellets in packed bed, 17915
 Lake Superior resources, 14346
 mineral industry survey, 3447, 5106
 minerals yearbook chapter, 6641
 particles at meteoric velocities, ionization probability, 11406
 Pederson process adaptation to ferruginous bauxites of Pacific Northwest, 9788
 processing of high-iron Arkansas bauxite ores, 9766
 products, identification markings, Federal standard, 2269

Iron—Continued
 pure, residual resistance ratio, 5348
 trade and tariff information, summaries, 18257
see also Cast iron.

Iron castings, *see* Castings.

Iron County, Mich., geology of Kelso Junction quadrangle, 6392

Iron garnets, *see* Garnet.

Iron ores, *see* Iron—also name of special iron ore, e.g., Hematite.

Iron oxides:
 electron optical survey of films produced in H_2O , $LiOH$, and $LiOH/EDTA$ solutions, 8594
 pigments, minerals yearbook chapter, 1399

Iron Springs formation, Utah, geologic interpretation of aeromagnetic survey, 11173

Irradiated gases transferred without contamination or dilution, 8469

Irradiation, *see* Gamma rays—Neutrons—Radiation.

Irradiation capsules, *see* Radiation target cans.

Irrigation:
 farm systems, planning, 14652
 mosquito prevention on irrigated farms, 7261
 operation and maintenance bulletin, 1399
 pipe trailer, farm building plan, 1707
 projects, water measurement manual, 11776
 publications, price list, 8623
 SCS national engineering handbook, 14652
 sprinkler systems, description, buying, etc., 5638
 Western States, quality of surface waters, 8185
 wireworms on irrigated lands, control, etc., 10170

Irrigation projects, *see* Reclamation of land—also names of projects.

Irrrotational flow of frictionless fluids, mostly of invariable density, 11682

IRS, *see* Internal Revenue Service.

Irwin, James H., geology and availability of ground water on Ute Mountain Indian Reservation, Colo. and N. Mex., 6409

Is there a job in your future? 4687

Isakson, G., discrete-element methods for plastic analysis of structures, 17933

Istblster, John, geology and hydrology of northeastern Nassau County, Long Island, N.Y., 4894

Ischemia, myocardial, electron-histochemical investigation, USSR study, 14219

Isentropic process, flow, solutions for reacting gas mixtures in thermochemical equilibrium, 16979

Ishmael, George D. convey land to, 4494

Ishmael, Verna H., convey land to, 4494

Islam, *see* Mohammedanism.

Islamic Republic of Mauritania, *see* Mauritania.

Island Falls quadrangle, Maine, bedrock, geological-geophysical investigations, 6401

Island Park, Iowa, accident, 11238

Islands, *see* names of islands.

Isleta paintings, artist in pueblo society, letters, etc., 14547

Isocyanates process produces chlorimated aromatic isocyanate in high yield, 6808

Isolation effects of sensory deprivation on sensory perceptual, motor, cognitive, and physiological functions, 8419

Isolator, synthetic phase, signal processing technique, study, 11397

Isophellidae, *see* Sea anemones.

Isostatic compression process converts polyaromatics into structural material, 12808

Isothermal and isophotic atlas of moon, contours through lunation, 16894

Isotopes:
 alpha emitting, monoenergetic X-rays from, generation and practical use, 4234

Isotope
 devel
 leg
 fluor
 em
 fract
 12
 isoto
 ter
 isoto
 isoto
 18
 powe
 ga
 radi
 ap
 bl
 eff
 ex
 ge
 ho
 pe
 te
 ut
 syst
 co
 tran
 ura
 th
 1
 visi
 X-r
 e
see
 Isotro
 brei
 ISPO
 Om
 Israel
 acc
 l
 agr
 1
 ato
 a
 cap
 cot
 eco
 edu
 f
 ext
 for
 lab
 Le
 mo
 So
 toe
 Un
 Un
 wa

Isotopes—Continued

- development program, AFC authorizing legislation, 1968, hearings, 10491
 - fluorescent excitation using isotopic X-ray emission, 5779
 - fractioning in underground nuclear blast, 1268
 - isotopes and radiation technology, quarterly technical progress review, 3449
 - isotope preparations, report, 14518
 - isotopic water current meters, DWICA's, 13528
 - powerful tools of scientific research, Bulgarian study, 4940
 - radioisotopes—
 - applications in hydrospace, final reports—
 - Dowtherm A heat transfer tests 5762
 - Dowtherm A Rankine cycle technology, 5761
 - fuel specifications, 1777
 - program plan, 1776
 - RISE conceptual design, 5760
 - biological sciences, annotated bibliography, 10304
 - effects on life processes, bibliography, indexes, 13343
 - experiments in high school biology, bibliography, 5797
 - gauge for monitoring suspended sediment concentration in rivers and streams, 1794
 - how to get license to use, 17405
 - power from, 7444
 - techniques for instruction in biological sciences, 8910
 - techniques, radiochemical analysis, 2746
 - use as power sources in Western Europe, 15416
 - systems development program, 8th annual contractor meeting, 13317
 - transuranium, formation in power reactors, 124
 - uranium and plutonium, isotopic composition in reactor fuel element solutions, 13333
 - visit to USSR isotope center, 16770
 - X-ray sources for portable stress analysis equipment, feasibility, 14809
 - see also names of isotopes, e.g., Neon.
- Isotropy, plane isotropic buildup factors for bremsstrahlung calculations, 15565
- ISPO, see International Statistical Programs Office.
- Israel:
 - accessions list, Library of Congress, American Libraries Book Procurement Center, Tel-Aviv, 3450
 - agricultural commodities, agreement, 17245
 - atomic energy cooperation for civil uses, agreement, 5533, 7157
 - capsule facts for Armed Forces, 13281
 - cotton textiles trade, agreement, 11855
 - economy, basic data, 4434
 - education, Educational Foundation, and financing and exchange programs, agreement, 11874
 - extradition convention, correction of text, agreement, 13153
 - foreign trade regulations, 9020
 - labor law and practices, 16812
 - Lebanon armistice line, boundary study, 11829
 - modern education system, development, 6187
 - Soviet-Arab contradictions in their relations with Israel, 14241
 - today and tomorrow, 5025
 - United States policy in Near East crisis, 14680
 - United States travelers, you can assist U.S. balance of payments, 11887
 - war or peace in Middle East, study mission report, 10837

- Isthmian Canal, see Panama Canal.
- Istie, suspension of duty, continue, report, 884
- Isurus, see Sharks.
- Itagaki, Kazuhiko, cloud droplet camera, 4202
- Italian physicist in North Vietnam tells of culture and civilization as bombs fall, 12699
- Italy:
 - background notes, 18222
 - claims of American nationals, timely determination, hearing, 12300
 - cotton velvet fabrics exports, trade agreement, 11845
 - economy, basic data, 16107
 - educational foundation and financing of exchange programs, agreement, 11842
 - establishing business in, 17475
 - Italian Armed Forces, World War II records, guide, 17028
 - marriage documentary requirements for United States citizens in Italy, agreement, 15767
 - mineral industry, minerals yearbook chapter, 14333
 - scientific cooperation, agreement, 17231
 - U.S. Army, Southern European Task Force, personnel ordered to, helpful hints, DA pamphlet, 11891
- Item identification, see Identification.
- It's fun to yell bravo, Lincoln Center's program opens new world to teenagers, 12465
- It's the latest, it's the greatest, it's the li-ber-ee, 12466
- ITSA, see Institute for Telecommunication Sciences and Aeronomy.
- ITV (instructional television), see Television.
- Iverson, Henry G., reactions of manganese with silica, 6684
- Ivins, Robert A., relief, 307
- Ivory Coast:
 - economy, basic data, 13466
 - housing, basic information, 6419
 - labor conditions, 1375
 - mineral industry, minerals yearbook chapter, 8354
- Ivy, see Poison Ivy.
- Iwo Jima, Marines, battle and flag raising, 14311
- Izquierdo, Angel R. Ramos, see Reaud, Angel.
- Izvestiya VUZov (periodical):
 - instrument building, 3451

J

- J. Herschel LAC 11, lunar chart, 10224
- Jablonski, Stanley, Russian drug index, 8534A
- Jacchia, Luigi G., analysis of atmospheric trajectories of 413 precisely reduced photographable meteors, 18204
- Jack pine, see Pine.
- Jackpile mine, uranium deposits, etc., 8165
- Jackson, Andrew:
 - papers, index, 6623
 - 10-cent regular postage stamp (poster), 7041
- Jackson, Charles T. Jr., validation of research simulator for investigating jet transport handling qualities and airworthiness criteria during takeoff, 1476
- Jackson, George T., soil survey of Warren County, Tenn., 17208
- Jackson, Glenn A., measuring human performance with parameter tracking version of crossover model, 17944
- Jackson, R. J., properties and current applications of magnesium-lithium alloys, 8441
- Jackson, Robert A., stability of proposed breakwater, Burns Waterway Harbor, Ind., hydraulic model investigation, 7933
- Jackson, Miss., area wage survey, 11314
- Jackson County, Ark., water resources, 14181

INDEX 1967

Jacksonville, Fla., area wage survey, 9745
 Jacobsen, Carl R., basic data on economy of Costa Rica, 7678
 Jaffe, Arthur, review of occupational employment statistics, employment of scientific, professional, and technical personnel in State governments, 15450
 JAG journal, 3452
 JAG law review, 8453
 Jahn, Otto L., degreening response of color-sorted Florida oranges, 17300
 Jamaica:
 agricultural production, indices, 4700
 background notes, 14665
 capsule facts for Armed Forces, 17368
 Cayman Islands, weather station, agreement with Great Britain, 7192
 economy, basic data, 13461
 exchange of official publications, agreement, 13145
 James, George A.:
 recreation use estimation on Forest Service lands in United States, 15284
 use of water-meter records to estimate recreation visits and use on developed sites, 12579
 James, Hugo A., range and variations of subspecies of *Cambarus longulus*, 6947
 James, Joseph, or heirs, relief, 610
 James, Lawrence W., sensitive recording NMR ultrasonic spectrometer, 2744
 James, Maurice T., species of *Hermetia* of aurata Group, 11609
 James, Thomas G., effects of electron irradiation from 20 KeV to 1 MeV on polyethylene terephthalate capacitor-type meteoroid detector, 1491
 James division, *see* Missouri River Basin project
 Jameson, Donald A., juniper control by individual tree burning, 2313
 Jamison, D. E., command processors, 14479
 Jams:
 citizenship and strawberry jam, FSA's protective role in food industry, etc., 15272
 how to make at home, 5629
 Jane, Magaly, relief, 10722
 Japan:
 aluminum industry, 9015
 background notes, 15756
 economy, basic data, 5951
 Engineers Corps, technical services in war against, 5096
 establishing business in, 232
 fisheries—
 king crab, agreement, 7185
 off U.S. coast and salmon fisheries, agreement, 15794
 French bathyscaphe departs for Japan, 9631
 geodetic satellite observation station, agreements, 8732, 11867
 health information for travel, 13078
 Japanese Association for Radiation Research on Polymers, annual report, 5758
 loan of vessel, reduction, agreement, 17244
 market, U.S. farm products, competitive position, 995
 military personnel of U.S. Army ordered to, helpful hints, 7387
 mineral industry, minerals yearbook chapter, 12803
 mutual defense assistance, agreement, 15778
 northern part, sailing directions, change, 2771
 plant quarantine requirements, 5617
 tariff concessions, staging, amending agreement, 15802
 trade agreement relating to GATT, 5540
 trade with Japan (address), 1936
 visas, waiver of nonimmigrant fees, agreement, 2919

Japan—Continued

wages—
 Joint United States-Japan wage study, 2489
 similarities and contrasts with U.S. system, 16827
 welding equipment industry, 12081
 World War II operations in southwest Pacific area, reports of Gen. MacArthur, 11992
 Japan Air Lines, Ltd., accident, 17059
 Japanese coolly trade laws, repeal, report, 7684
 Jaremenko, Igor M., wakes, their structure and influence upon aerodynamic decelerators, 9808
 Jarrell, Randall, lecture by Karl Shapiro, 12780
 Jarvis, Calvin R.:
 on-off rate command attitude control system of manned lunar-landing research vehicle, 9888
 operational experience with electronic flight control systems of lunar-landing research vehicle, 1496
 Jarvis, N. L., surface viscosity of polydimethylsiloxane monolayers, 8592
 Jaws, role of depressor mandibular muscle in kinesia of avian skull, 11610
 Jayson, Paul, naval aviation news, 3605
 JCH series, 4688, 7875-76, 9381, 12448
 JCS pub. series, 16730
 Jech, Robert W., fibering of oxides in refractory-metal matrices, 9900
 JEEP (Joint engineering-enforcement project), *see* Operation 66
 Jefferies, Kent B., nuclear reactor simulator for nonnuclear testing of space, power systems, 14487
 Jefferson County, Colo.:
 geology and uranium deposits of Ralston Buttes district, 15308
 geology of Eldorado Springs quadrangle, 11165
 Jefferson County, Ky., soil survey report, 8704
 Jefferson County, Mont.:
 geology and igneous petrology, 2367
 igneous geology, 2358
 Jefferson National Forest, establish Mount Rogers National Recreation Area as part, report, 2085
 Jefferson's manual, text, 7593, 10691
 Jeffrey pine, *see* Pine
 Jellison, Robert A., relief, 325, 4579
 Jelly, how to make at home, 5629
 Jellyfish:
 and other such pests, control—
 hearing, 4635
 law, 434
 report, 671
 Jenkins, H. Neff, odors, air pollution survey, 5440
 Jenkins, Howard, Jr.:
 addresses, etc.—
 Aug. 8, 1967, 14525
 Aug. 16, 1967, 15593
 Jenkins, Julian L., Jr., transient blade motions of rotor with flapping and lead-lag degrees of freedom, 17610
 Jenkinson, Paul M., edgewise compressive properties of titanium and nickel-base sandwich constructions at elevated temperatures, 8102
 Jennette, Jo Ellen, project moneywise, role of credit unions in war on poverty, 9451
 Jensen, Albert T., brief history of New England offshore fisheries, 8021
 Jerez, Ernesto Sanchez, *see* Sanchez Jerez, Ernesto
 Jersey cattle, *see* Cattle
 Jersey City, N.J., area wage survey, 11328
 Jet aircraft, *see* Aircraft
 Jet airplanes, *see* Airplanes
 Jet ejectors, *see* Ejectors

Jet plun
 effects
 of f
 effect
 at t
 Jet sho
 device
 Jet stre
 Jets :
 circul
 jets
 free
 sur
 landi
 fiel
 nose
 fro
 fec
 obliq
 flu
 react
 sys
 84
 refr
 ten
 secon
 by
 see a
 Jetties
 engin
 groin
 Jewel
 Jex, H
 mach
 effec
 Jesev
 opti
 ed th
 Jearli
 water
 jace
 Jigs (c
 alun
 welc
 Jih, F
 t
 brain
 Job ar
 Air
 v
 Air
 e
 alr
 c
 n
 com
 f
 com
 t
 elec
 haz
 1
 hov
 1
 job
 +
 job
 Job
 An
 en
 co
 ec

Jet plumes:

- effects of jet pluming on static stability of rocket models, 14467
- effects on static stability of ballistic bodies at Mach number 6.00, 2691
- Jet shoes, extravehicular space locomotion device, 8483
- Jet streams, *see* Winds.

Jets:

- circulation control airfoils by means of jets, 7408
- free jet impingement normal to curved surface in vacuum, 9897
- landing task in jet trainer with restricted fields of view, flight investigation, 11553
- nose mounted control, exhausting radially from ogive-cylinder body, interaction effects, 5237
- oblique impingement, effect on pressure fluctuations on flat plate, 14388
- reaction jet damping and attitude control system for spinning body, simulation, 8455
- refraction of sound by jet flow and jet temperature, 14389
- secondary, from 2-dimensional nozzles, for hypersonic control application, 5266
- see also* Air Jets.

Jetties:

- engineering and design manual, 12475
- groin design variations, 16521
- Jewel bearings, United States trade, 12030
- Jex, H. R., critical tracking task for man-machine research related to operator's effective delay time, 1426
- Jewski, Donald J., impulsive solution in optimum trajectory problems with bounded thrust magnitude, 12963
- Jicarilla Apache Indian Reservation, ground water resources of southern part and adjacent areas, 17829

Jigs (machinery):

- aluminum, heat treatment stabilized after welding, 2625

- Jiji, Latif M., heat transfer and temperatures distribution of conical porous membrane during planetary entry, 11554

Job analysis:

- Air Force, impact of computer, 13268
- Air Force officer position evaluation, development of benchmark scales, 5705
- Air Force officers grade requirements project, Criterion Board ratings, predicting, 15891

airman jobs—

- comparison of merited grade and skill level ratings, 4172
- merited grade versus merited pay rankings, 7339

- computation of group job descriptions from occupational survey data, 11951
- conducting job hazard analysis, occupational safety aid, 9697, 16799
- electronic engineers, job types, 4170
- hazards, safety in industry, instructor outline, 14280

- how to design positions for managers and staff participating in position design studies, 5724

job descriptions—

- ARNG technician program, NGB pamphlet, change, 11597
- publications, price list, 17133
- job types of Air Force communications officers, 15892

Job Corps:

- American business is hiring graduates, 2162
- candidates, identifying, admissions manual, 4688
- conservation centers, resident youth worker, examination announcement, 12111
- economic opportunity act amendments—law, 498
- narrative summary, 9382
- report, 17581

Job Corps—Continued

- establishment, act, as amended, 7874
- every girl needs chance to become somebody, 4686
- facts, 4689

- is there a job in your future? 4687
- logistics handbook for Job Corps centers, 7875

- men's and women's centers, facilities maintenance and utilities operations handbook, 7876

- men's urban centers, vocational course entry requirements, 12448

- staff code, 9381
- staff newsletter, 3454

- training disadvantaged young men for employment, they need to learn, can you help, 7878

- VISTA serves, 6168
- women's centers, facts, 10908

- Job Corps Conservation Centers National Conference, report, 17346

- Job descriptions, *see* Job analysis.
- Job evaluation, *see* Job analysis.

- Job printing shop, 15731

- Job satisfaction: and intent to re-enlist, effect of selected variables, 7370

- factors, survey of maintenance airmen, 10241

- Job where the action is, 4907

- Jobs, *see* Civil service — Employment — Job analysis — Occupations — Training — Unemployed—Women—Work.

- Joe Wheeler finds a job and learns about Social security, 14647

- answer sheet, 14648

- Joesting, H. R., regional geophysical investigations of Moab-Needles area, Utah, 2368

- Johansen, R. W., reproducible system for evaluating forest fire retardants, 15288

- John, James E. A., attainment of clean vacuum with one-watt refrigerator, 12930

- John Day Lock and Dam: compensation to Umatilla, Oreg., for losses due to project—

- law, 485
- report, 838

- John Day River Bridge, Oregon, interstate route 80N, review of circumstances relating to collapse, GAO report, 4877

- John F. Drews (vessel): continue coastwise privileges, 312, 4577

- John Fitzgerald Kennedy National Historic Site:

- establish—

- hearing, 9318
- law, 10489

- reports, 9113, 9269

- John Hay, Camp, relinquishment of certain land areas, agreement with Philippines, 11843

- John Muir National Historic Site, general information, 9961

- Johnson, A. I.:

- aquifer properties and well design for artificial recharge site, 1128

- specific yield compilation, for various materials, 16701

- Johnson, A. M., demineralization of saline water by environmentally modulated adsorption, 8212

- Johnson, C. D., optimal and adaptive control theory, 8414

- Johnson, David H., neotropical species of genus *Triplax* Herbst and review of genus *Haematochiton* Gorham, etc., 11698

- Johnson, E. W., ornamental woody vines for southern Great Plains, 1688

- Johnson, Edward E., review of mineral industries (metals and nonmetals except fuels), 6689

- Johnson, G., detectors and calibration methods for remote sensing systems, 9809

INDEX 1967

- Johnson, Glenn E.:
hydrogen cyanide from reaction of coal with ammonia, 14349
use of coal and modified coals as adsorbents for removing organic contaminants from waste waters, 2588
- Johnson, H. M., motions in upper troposphere as revealed by satellite-observed cirrus formations, 9430
- Johnson, H. S., jr., uranium deposits of Moab, Monticello, White Canyon, and Monument Valley districts, Utah and Arizona, 6391
- Johnson, Harold K., testimony, hearings, 16394
- Johnson, Helen W., age of transition, rural youth in a changing society, 17305
- Johnson, Herbert W., growing soybeans, 8828
- Johnson, Hugh A.:
outdoor recreation and associated research needs for suburban forests, 7888
publications on outdoor recreation research, 13945
toward measuring intangible values of natural beauty, 12461
- Johnson, J. A., experimental investigation of direct freeze separation process, etc., 12644
- Johnson, J. E., flammability in unusual atmospheres, preliminary studies of materials in hyperbaric atmospheres containing oxygen, nitrogen, and/or helium, 11675
- Johnson, J. O., determination of strontium-90 in water, 6410
- Johnson, Jesse C., relief, 4580, 9258, 13505, 13561
- Johnson, John, cloud on title to real property, remove, 10479, 10524, 12328
- Johnson, Lyndon B., see President of United States.
- Johnson, Marlon M., index to manuscript and revised printed opinions of Supreme Court in National Archives, 14512
- Johnson, Nicholas:
nomination, hearings, 6094
remarks, Aug. 16, 1967, 16564
- Johnson, Phillip C.:
distribution of bark beetle attacks on ponderosa pine trees in Montana, 11115
some causes of natural tree mortality in old-growth ponderosa pine stands in western Montana, 4830
- Johnson, Philip L., vegetation of Yukon Flats region, Alaska, 5725
- Johnson, R. L.:
current meter performance, 4729
spillway and stilling basin, Lower Monumental Dam, Snake River, Wash., 10949
- Johnson, Robert C., mineral industry of South Carolina, 1404
- Johnson, T. L., thermoluminescent dosimetry systems compared with film badges, 8599
- Johnson, U. Alexis, Foreign Service, briefing, 18227
- Johnson, Von J., seasonal fluctuation in moisture content of pine foliage, 2305
- Johnson, W. M., pot tests of productivity and nutritive status of 3 alpine soils in Wyoming, 2317
- Johnson, Warren B., jr., effect of inversion waves upon sonic-boom propagation, 9427
- Johnson, Wilfrid E.:
remarks—
Nov. 3, 1966, 131
Dec. 8, 1966, 1817
Apr. 10, 1967, 7441
Apr. 14, 1967, 8914
Oct. 26, 1967, 17407
- Johnson, William R., helium pressurant requirements for liquid-hydrogen expulsion using submerged gas injection, 14492
- Johnson act, export sales to countries in default in payment of their obligations to U.S., opinion of Attorney General, 16789
- Johnston, Ralph G., flying helicopters over mountains at night, guidance systems tested in 1965 phase of study, 8089
- Johnston, Richard B., Hitchell site, 10081
- Johnston, Robert L., stress-corrosion cracking of Ti-6Al-4V alloy in methanol, 6900
- Johnstown, Pa., war on poverty, examination, hearings, 17665
- Join VISTA and see the world, 10909
- Joher, Robert C.:
changes in negotiated health and insurance plans, 2521
digest of 100 selected health and insurance plans under collective bargaining, 6058
- Joint Chiefs of Staff, JCS pub. series, 16730
- Joint financial management improvement program, annual report, 11144
- Joint Institute for Nuclear Research, Dubna, Russian SFSR, tenth anniversary, Hungarian evaluation, 1300
- Joint Nuclear Research Institute, see Joint Institute for Nuclear Research, Dubna, Russian SFSR.
- Joint Publications Research Service:
catalog, current translations, addendums, 2425, 15344
- JPRS series, 1155-1347, 2426-81, 3113-23, 3130, 3176, 3217-25, 3242, 3374, 3396-97, 3410-11, 3451, 3556, 3687, 3691, 3701-2, 3852, 3882, 3886-87, 3889, 3944-65, 3967-72, 4013-31, 4036, 4931-5032, 6479-6587, 8238-78, 9609-77, 11242-290, 12659-761, 14212-276, 15345-430, 16733-787, 17860-882
- Joint Salary Commission, establish, message from the President, 9069
- Joints:
brazed, high strength, between copper and steel, 14420
brazed joint quality tested electromagnetically, 16964
brazed aluminum, low-energy gamma ray inspection, 16967
metals joining, NASA contributions, 6738
pipe, reinforced in place with fitted aluminum sleeves, 15541, 17954
plastic surgery, preparation, preservation and use of bones, USSR study, 15347
silver plating technique seals leaks in thin wall tubing joints, 6699
spherical, axially misaligned flanges connected, 15543
spherical pipe joint delivers loads equally to mating flange, 6823
structural-joint damping, effect of model scale, 18025
trussed rafter, moisture cycling, 8101
weld joint damage, test device prevents by eliminating pin forces on unpotted modules, 17970
- Joncas, Basil, or helrs, relief, 610
- Joncas, James, or helrs, relief, 610
- Joncas, Louis, or helrs, relief, 610
- Jones, Alfred, theoretical segregation ratios of qualitatively inherited characters for hexaploid sweetpotato, 5688
- Jones, David L., Cretaceous ammonites from lower part of Matanuska Formation, southern Alaska, 8170
- Jones, Donald R., utilization of mental health manpower, 2829
- Jones, Dorothy M.:
children who need protection, 1892
community planning for health, education, and welfare, bibliography, 16540
- Jones, Harry L., relief, 7638
- Jones, John R.:
regeneration of mixed conifer clearcuttings on Apache National Forest, Ariz., 11126
site index table for aspen in southern and central Rocky Mountains, 2310
- Jones, Lawrence A.:
crop-hail insurance 1965, volume, cost, and demerits, 9392
insurance facts for farmers, 11928

Jones, Lawrence A.—Continued
 planning farm machinery replacements, 4115
 Jones, LeRoy, size and germination of white pine seed collected at weekly intervals from 5 trees, 12580
 Jones, Mary G., nomination, hearing, 6095
 Jones, Milbrey L., sources of audiovisual materials, 7912
 Jones, Mildred V., wool statistics and related data, 1920-64, 1966 supplement, 13249
 Jones, Owen W., mineral industry of Louisiana, 5114
 Jones, Paul R., computer usage for evaluation of design parameters and cost of heat exchangers, 14324
 Jones, R. L., electron optical survey of iron oxide films produced in H₂O, LiOH, and LiOH/EDTA solutions, 8594
 Jones, Richard K., relief, 12334, 13613
 Jones, Robert A., flow field, etc., investigation of tension shell configurations, 5270
 Jones, Robert M. plastic buckling of axially compressed eccentrically stiffened cylinders, 5249
 Jones, William I., development digest, 3202
 Jones, William R., general geology of Santa Rita quadrangle, Grant County, N. Mex., 14171
 Jones Beach, Long Island, N.Y. aircraft accident, 4369
 Jongh, Guillermo Fresco De, *see* Fresco De Jongh, Guillermo
 Joppa, Robert G., method of calculating wind tunnel factors for tunnels of arbitrary cross-section, 14393
 Jordahl, Harold C., jr., nomination, hearing, 16493
 Jordan, James S., deer browsing in northern hardwoods after clearcutting, 8109
 Jordan, Max F., rural industrialization in Osarks, case study of new shirt plant at Gasville, Ark., 17711
 Jordan, Peter F., vibration study of pressurized torus shell, 16907
 Jordan, Russell W., relief, 324, 819
 Jordan:
 agricultural commodities, agreements, 2888, 2917
 capsule facts for Armed Forces, 15906
 housing, basic information, 6420
 Ministry of Social Affairs and Labor, 1965-66 annual report, 11279
 war or peace in Middle East, study mission report, 10837
 Jordan Ferrando, Maria, relief, 9208, 13499, 13594
 Jorden, Eleanor H.:
 Vietnamese, basic course—
 v.1, guide to pronunciation and lessons 1-10, 7195
 v.2, lessons 11-15, 10106
 Jorgensen, Leland H., measured and computed static aerodynamic characteristics of ablating conical teflon models at Mach number 14, 11555
 Joseph H. Hirshhorn Museum and Sculpture Garden:
 establish—
 law, 492
 reports, 883, 896, 4506
 Joule-Thomson process in cryogenic refrigeration systems, 12989
 Journal hearings, *see* Hearings (machinery).
 Journals:
 Antarctic Journal of United States, 3031
 civil service, 3095
 House of Representatives, 89th Cong., 2d sess., 7591
 JAG Journal, 3452
 Journal of research, National Bureau of Standards, 2736, 3458-60
 Library of Congress quarterly, 3795
 National Cancer Institute, 3457
 Senate, 89th Cong., 2d sess., 6050

Journals—Continued
 Supreme Court, 3924
 see also Medical journals.
 Journals (machinery), *see* Bearings (machinery).
 Journey to a future, 12482
 JPRS, *see* Joint Publications Research Service.
 JPRS series, 1155-1347, 2426-81, 3113-23, 3130, 3176, 3217-25, 3242, 3374, 3396-97, 3410-11, 3451, 3556, 3687, 3691, 3701-2, 3852, 3882, 3886-87, 3889, 3944-65, 3967-72, 4013-31, 4036, 4931-5032, 6479-6587, 8235-78, 9609-77, 11242-290, 12659-761, 14212-276, 15345-430, 16733-787, 17860-882
 Juab County, Utah, geologic interpretation of gravity and aeromagnetic maps of Tintic Valley area, 8164
 Judaism, primitive magic, USSR views, 2452
 Judge Advocate General, Air Force:
 activities, manual, 10220
 digest of opinions, 2150
 law review, 3453
 report, 7844
 Judge Advocate General, Army:
 digest of opinions, 2150
 legal service, pamphlets, 3461
 report, 7844
 Judge Advocate General, Navy:
 digest of opinions, 2150
 JAG Journal, 3452
 organization and functions of office, 15633
 report, 7844
 Judge Advocate General's Corps, Navy:
 establish—
 hearing, 16310
 report, 16269
 Judge Advocates General of Armed Forces:
 boards of review, court martial reports, holdings and decisions, 4671
 digest of opinions, 2150
 Judges:
 District of Columbia Court of Appeals, increase number, report, 13638
 Federal—
 appointment records, pamphlet to accompany microcopy, Idaho, Territory and State, 18071
 judicial fitness, removal, retirement, and disciplining procedures, hearings, 7319
 Federal magistrates act, hearings, 12416
 omnibus judgeship act, amend rel. to eastern district of Pennsylvania—
 law, 17544
 reports, 13834, 16236
 territorial district courts, retirement, hearings, 2054
 Judgments, *see* Actions at law—Claims—also names of courts, etc., rendering judgments—also special subjects.
 Judicial administration, hearings, 2054
 Judicial center, *see* Federal Judicial Center.
 Judicial Conference of United States:
 proceedings—
 departmental editions, 14730-731
 document editions, 14922, 14928
 reports, 8800
 Judicial procedure, *see* Civil procedure.
 Judicial review, constitutionality of grants or loans under certain acts, report, 10729
 Judiciary, *see* Courts of United States—Justice Department.
 Judiciary Committee, House:
 activities, summary, 4549
 additional funds, provide, report, 2032
 calendar, 3480
 committee prints, 4549, 10662, 16334
 hearings, 742, 2054, 4548, 7750-51, 10661, 12306, 15044, 16332, 17606
 Investigations and studies—
 authorization, reports, 6014, 7716, 14983
 expenses, report, 7721
 school desegregation, referring investigation, 4559

INDEX 1967

Judiciary Committee, House—Continued
 reports, 529, 531-516, 619, 635, 637, 662,
 678, 688, 4498-99, 7705-7, 7614-45,
 7654-62, 7683-84, 9079-80, 9082, 9084,
 9093-9095, 9121, 10529-52, 10609-610,
 12210-239, 12257-258, 12279, 12282-
 283, 12660-625, 13647-648, 13670,
 13873, 13680-681, 14931, 14965, 14975-
 976, 14984, 14990, 16164, 16166-225,
 16235-236, 16248, 16254, 16259, 17571,
 17578
 Judiciary Committee, Senate:
 calendar, 3498
 committee prints, 2126, 2129-30, 4647,
 6114, 12414, 13872, 15168-169
 hearings, 957-958, 2125, 2127-28, 2131-
 32, 4645-46, 4648-49, 6115-19, 7816,
 7818-22, 8224, 10856-858, 12415-418,
 13871, 13873-876, 15165-167, 16410-
 425, 17658-662
 Internal security subcommittee hearings
 and reports—
 1956-60, index, 15169
 1961-66, index, 15168
 Investigations and studies—
 administrative practice and procedure
 in Federal agencies—
 authorization, report, 4616
 expenses, report, 15099
 report on findings, 9280
 antitrust and monopoly laws, adminis-
 tration, authorization, report, 4617
 constitutional amendments—
 authorization, report, 4618
 report on actions and recommenda-
 tions 10730
 constitutional rights, authorization and
 expenses, report, 6069
 constitutional separation of powers be-
 tween executive, judicial, and legisla-
 tive branches of Govt., authorization,
 report, 4621
 criminal laws and procedures—
 authorization, report, 4602
 report on subcommittee work, 9284
 Federal charters, holidays, and celebra-
 tions authorization, report, 4601
 Federal judicial system—
 authorization and expenses, report,
 6070
 expenses, report, 15095
 report on findings, 9287
 Immigration and naturalization—
 authorization, report, 4603
 report on findings, etc., 9286
 Internal security laws, etc., administra-
 tion, authorization, report, 4619
 juvenile delinquency, authorization, re-
 port, 6071
 national penitentiaries, authorization,
 report, 4607
 Patent Office administration and patent
 statutes, authorization, report, 4604
 refugees and escapees, authorization,
 report, 4620
 revision and codification of U.S. sta-
 tutes, authorization, report, 4608
 reports, 768-781, 784-872, 876-878, 894,
 909, 918, 923-924, 928-930, 2081, 4576,
 4578-81, 4583, 4587, 4589, 7776, 9191-
 9249, 9251-62, 9280, 9284-93, 10705-
 725, 10729-730, 10743, 10771-780,
 10793, 12325-326, 12329-358, 12363,
 12376-377, 12379, 12503-395, 13728-
 774, 13776-789, 13810-811, 13831,
 13833-834, 15062, 15066-73, 15075-77,
 15085, 15089, 15106, 15110, 15121,
 17621-622
 Revision and Codification Subcommittee,
 résumé of activities, report, 10743
 Judith Basin County, Mont., soil survey re-
 port of area, 7136
 Judy, R. W., Jr., stress-corrosion cracking
 characteristics of alloys of titanium in salt
 water, 17091
 Juices, *see* Fruit juices.

July rain, Soviet motion picture reviewed,
 16771
 Jun, Becky, relief, 294, 587, 812
 June bugs, white grubs in forest tree nur-
 series and plantations, 12567
 Junior colleges, science education, report,
 16343
 Junior Federal assistant:
 examination, 4402
 job opportunities throughout United
 States, 13446
 Junior high schools, public, science, teaching,
 7909
 Junior ROTC Manual, 17385
 Juniper, *see* Cedar.
 Junkyards:
 along Federal-aid highways, control, 1968
 authorization—
 hearings, 15174
 reports, 15126, 16272
 Jupiter (planet):
 high-thrust round-trip trajectories, 5233
 physical properties, handbook, 11424
 round-trip trajectories to moons of Jupi-
 ter, 18017
 use of Jupiter gravity turns for tailoring
 trajectories to Saturn with considera-
 tion of launch opportunities, 2692
 Jurassic period:
 Carmel formation of Zion Park region,
 southwestern Utah, review, 11168
 Morrison formation in Colorado Plateau
 region, petrology, 12613
 Twin Creek limestone (Jurassic) in west-
 ern interior of United States, 8168
 Jurisdiction:
 Federal Power Commission, amend act,
 hearings, 16401
 Fort Lyon Veterans Hospital, retrocede to
 Colorado—
 law, 368
 report, 898
see also Venue.
 Jury:
 duty, women, eligibility, laws, 5603
 Federal, improve machinery for selection,
 hearings, 16423
 selection—
 eliminate discrimination, message from
 the President, 12199
 protect civil rights—
 hearings, 17658
 report, 4498
 Justice:
 administration—
 Memphis-Shelby County, Tenn., civil
 rights report, 14851
 Starr County, Tex., civil rights aspects,
 13433
 1st annual report of Legal Services Pro-
 gram of Office of Economic Opportunity,
 4690
 juvenile justice administration, etc., task
 force report, President's Commission on
 Law Enforcement and Administration
 of Justice, 11703
 law enforcement and criminal justice as-
 sistance act of 1967, reports, 13670,
 13685
 legal services in action, the poor seek jus-
 tice, 12449
 Justice Department:
 annual report, 9678
 antitrust activities, 8280
 appropriations, 1967, law, 501
 appropriations, 1968—
 hearings, 10632, 16390
 reports, 10616, 16372
 Attorney General—
 appointment of U.S. marshals, hearings,
 2054
 nomination of Ramsey Clark, hearing,
 9324
 Attorney General's memorandum on pub-
 lic information section of administrative
 procedure act, 12762

Justice Department—Continued

- Criminal Division, efforts against organized crime, hearings, 13706
handling of VA mortgage foreclosures—
hearings, 15031
report, 14947
judicial administration, code of Federal regulations, 6283
land conveyance to Ralph J. Litchard, 13579, 13776, 14891
opinions of Attorney General, 3660, 8279, 16789
policies and procedures for collecting judgments, fines, etc., GAO review, 11154
report under law consenting to interstate compact to conserve oil and gas, 15431
- Juvenile courts:
juvenile delinquency and youth crime, administration of juvenile justice, etc., task force report, President's Commission on Law Enforcement and Administration of Justice, 11703
statistics, 185
- Juvenile delinquency:
and youth crime, task force report, President's Commission on Law Enforcement and Administration of Justice, 11703
and youth offenses control act, summaries of training projects, 7233
control and typological approaches, status report, 17166
correction series, 13180-182
corrections, task force report, President's Commission on Law Enforcement and Administration of Justice, 10031
crime and delinquency abstracts (periodical), 3163
handling of juveniles from offense to disposition, 13180-181
instructor's guide, 13182
investigation, authorization, report, 6071
learning in action, training and demonstration projects, selected issues, 2973
nonmetropolitan delinquency, action program, 11906
prevention act of 1967, message from the President, 5990
prevention and control act of 1967—
hearings, 16324
report, 16249
public institutions for delinquent children, personnel and personnel practices, survey, 4367
public training schools serving delinquent children, directory, 4364
re-educating confined delinquents, 2798
supplement, 2799
studies in delinquency series, 7232, 8791, 10135
- Juvenile detention homes, see Imprisonment.
Juvenile literature, see Children's literature.
Juveniles, *see* Youth.

K

- Kachadorian, Reuben:
effects of earthquake of Mar. 27, 1964 on communities of Kodiak and nearby islands, 11176
effects of Truckee, Calif., earthquake of Sept. 12, 1966, 9565
- Kaestner, Gottfried R., relief, 556
- Kagarise, R. E.:
intensity measurements of some fundamental absorption bands of H₂O, D₂O, CS₂, 1550
performance capabilities of small grating spectrometers, 1549
- Kahrman, James S., relief, 263, 546, 860
- Kalden, Morris L., relief, 12224
- Kalden, Vivian C., relief, 12225
- Kalnen, Jacob, etchings of Canaletto, 10080
- Kale, caterpillar control in South, 15847

Kallil, F.:

- navigation accuracy for infrared equipped Apollo aircraft for reentry tracking, 1507
optical and microwave communications, a comparison, 11529
- Kalman filters, application to error correction of inertial guidance, 6904
- Kalnis, Martin A., light-induced free radicals in wood, 4846
- Kamel, Adel M., stability of rubble-mound tsunami barrier, Hilo Harbor, Hawaii, hydraulic model investigation, 16526
- Kangieser, Paul C., climates of States, Arizona, 4746
- Kanluka, R. P., agricultural research, 3000
- Kannel, William B., epidemiology of stroke, 11726
- Kansas:
area measurement reports, 150, 4266
bluestem, Flint Hills, pasture report, 14692
census of agriculture, 1964, State and county statistics, 13406
census of mineral industries, 1963, area statistics, 4287
climatological data, 3096
county business patterns, 1863, 12048
electric rate book, 1053
mineral industry, minerals yearbook chapter, 6653
postal map, 15655
precipitation data, hourly, 3401
sedimentary rocks, chemical composition, 14172
- Kansas City, Kans., area wage survey, 8305
- Kansas City, Mo., area wage survey, 8305
- Karatapanis, Chrisanthos S., relief, 16202
- Kardon, Merrill B., simple portable sonometer, 1741
- Kardakis, Maria, relief, 297, 589, 863
- Karitas, James J., determining costs of servicing wholesale institutional grocery orders, 4120
- Karpinos, Bernard D.:
profiles of military chargeable accessions, 10296
results of examination of youths for military service, 8900
- Karr, Clarence, Jr.:
characterization of resin fraction from various low-temperature tar pitches, 6632
identification of distillable paraffins, etc., from low-temperature bituminous coal tar, 12795
- Karlruhe, Herbert, complex fatigue loading, 5748
- Karyokinesis, mitotic activity in cells of human tissue cultures, USSR study, 4963
- Kascak, Albert F., estimates of local and average fuel temperatures in gaseous nuclear rocket engine, 16998
- Katchman, Bernard J., measurement of total body hemoglobin by bloodless techniques, 10232
- Katell, Sidney, bibliography of investment and operating costs for chemical and petroleum plants, 14328
- Katsanis, Theodore, velocities and streamlines for 2-dimensional, incompressible flow in axial blade rows, 5245
- Kattegat:
lights and fog signals, list, changes, 1539, 7005, 11645, 18101
sailing directions, change, 17070
- Katz, Jacob E.:
addresses—
Oct. 27, 1966, 144
Apr. 18, 1967, 8924
June 1, 1967, 10329
Aug. 22, 1967, 15985
- Katz, Lawrence G., climatological probability of aircraft icing, 7318

INDEX 1967

Katzenbach, Nicholas deB.:
addresses—
Dec. 9, 1966, 10099
Sept. 30, 1967, 18231
Kanal, plantation timber, 16665
Kaufman, Richard F., urban America, goals
and problems, 14921
Kaufman, Samuel, effect of cation on solubil-
ization by oil-soluble sulfonates, etc.,
17095
Kaufman, William, lease, Clover-Rush Run
oilfield, Roane County, W. Va., reservoir
study, 14347
Kaye, William G., address, Nov. 19, 1966,
1825
Kayser, Frederic G.:
foreign trade regulations of—
Guyana, 230
Netherlands Antilles, 13460
Surinam, 4441, 12134
Kazakh Soviet Socialist Republic:
Academy of Sciences—
activities, 8250, 12677
projects planned, 12753
scientific research, resolution, 4965
dam construction begun, 12670
parameters of jet streams and forecasting
instructions, 4994
Kazakhstan, see Kazakh Soviet Socialist
Republic.
Kazan University, USSR, general informa-
tion, 5029
Kearns, Thomas F., oil and gas lease, rein-
state, report, 10740
Keathley, S. M., stability theory of multistep
methods, 11523
Keeler, Charles M.:
densification of alpine snow covers, 15933
mechanical properties of alpine snow, Mon-
tana, 13292
Keenan, Hugh C., jr., how to obtain death
certificates, etc., 10701
Keep your drinking water safe, 5443
Keesing, Wouter, relief, 12343
Kelpert, Frank A., STARS II, fully auto-
matic satellite data processor, 11527
Keku Island, stratigraphy, 12600
Kelkar, Vasant S., vibrations of hollow elas-
tic cylinder bonded to thin casing of
different material, 18048
Keller, E. L., uranium hexafluoride, handling
procedures & container criteria, 1796,
13340
Kellogg, Remington, fossil marine mammals
from Miocene Calvert Formation of Mary-
land and Virginia, 1530
Kelly, James E., decayed, missing, and filled
teeth in adults, 1960-62, United States,
5470
Kelly, James R., V/STOL height-control re-
quirements for hovering, etc., under visual
conditions, 11524
Kelly, William P., jr., nomination, hearing,
10864
Kelsall, T., stellar evolution, calibration of
Hertzsprung-Russell diagram in terms of
age and mass for B and A stars, 2702
Kelso Junction quadrangle, Mich., geology,
6392
Kemp, James R., relief, 292, 614, 811
Kemp, Robert G., selling in Finland, 10461
Kenahan, Charles B., effect of ultrasonics
on electrodeposition of copper alloys from
cyanide electrolytes, 9787
Kendall, Nicholas A., mineral industry of
Mississippi, 2558
Kendall, William N. W., air-truck coordina-
tion and competition, 11231
Kennan, George F., statement on Communist
world in 1967, hearing, 6101
Kennard, Earle H., irrotational flow of fric-
tionless fluids, 11682
Kennedy, John F.:
prominent American stamp, dedication
(address), 11690

Kennedy, John F.—Continued
13-cent—
aerogramme (poster), 10025
regular postage stamp (poster), 10026
Kennedy, Marjorie D., confectionery manu-
facturers' sales and distribution, 7449,
10325
Kennedy, Richard M., market for U.S. prod-
ucts in Chile, 2417
Kennedy, Cape, interagency motor pool, utili-
zation of motor vehicles, GSA and NASA,
GAO report, 2353
Kennedy round, see General agreement on
tariffs and trade.
Kennesaw Mountain National Battlefield
Park, general information, 9962
Kennewick division, see Yakima project.
Kennon, F. W., hydrologic effects of small
reservoirs in Sandstone Creek watershed,
Beckham and Roger Mills Counties, west-
ern Oklahoma, 2376
Kent, Paul R.:
oxygen breathing effects upon night vision
thresholds, 11347
visual resolution underwater, 14317
Kentucky:
admission to Union, recognize anniversary,
report, 10779
Appalachian region, hardwood lumber
production, costs and returns, 4850
Bluegrass area and Pennyroyal area, com-
mercial tobacco-livestock farms, costs
and returns, 16490
calymenid and other Ordovician trilobites,
16698
census of agriculture, 1964, State and
county statistics, 16039
census of manufactures, 1963, area sta-
tistics, 1839
census of mineral industries, 1963, area
statistics, 5328
climatological data, 3096
contributions to Ordovician paleontology
of Kentucky (series), 16697-698
county business patterns, 4311, 13373,
14819
east-central, Otter Creek coral bed and its
fauna, 6394
eastern, strip-mining, land disturbances,
8077, 17801
electric rate book, 1054
lumber industry, 11136
mineral industry, minerals yearbook chap-
ter, 2555
northern, air resource management pro-
gram, air pollution survey, 1717
postal map, 15656
precipitation data, hourly, 3401
silicified Middle Ordovician brachiopods
from Kentucky, 16697
soil survey laboratory data and descrip-
tions, 13125
Kenya:
agricultural commodities, agreement,
14686
Army area handbook, 15941
labor conditions, 1376
mineral industry, minerals yearbook chap-
ter, 8355
Tanzania boundary, study, 1631
Keogh, Eugene J., award of Order of Isabella
the Catholic, authorize acceptance, 4493
Kerbel, L. Ye., Soviet sculptor, transcript of
conversation on Chinese artists, traditions,
and cultural revolution and Red Cross,
4948
Kerchner, Orval:
costs of transporting bulk and packaged
milk by truck, 8836
utilization of plant capacity in Minnesota
dairy manufacturing firms, 12454
Kermit, Tex., brackish well water reverse
osmosis tests, 11217
Kern, D. Q., liquid-liquid heat transfer for
large-scale desalination, 14200
Kern National Wildlife Refuge, general in-
formation, 8031

Kern Bi-
and h
Kerns,
salt,
water
Kerr, A
confi
Kershna
Forec
Kerslak
bility
son t
Kessler
digh
hand
Kessler
stan
Kessler
eral
elect
Kesten
regio
5183
Ketchu
5507
Key d
Key t
tion
Key V
of I
list,
Key w
Keyes
U.S.
Keyes
We
Keye
Keye
me
Keye
add
Khab
tut
Khar
Pro
im
Kida
Kida
ain
re
re
re
re
na
so
se
Kiel
el
Kiel
e
n
Kie
1
Kie
e
Kil
Kil
Kil
Kil
Kil
c

Kern River and Valley, ground water geology and hydrology of alluvial-fan area, 1116
 Kerna, William H.:
 salt, 6690
 water, 1417
 Kerr, Arnold D., bending of circular plates confining incompressible liquid, 97
 Kershner, Alan M., test correlates of Air Force weather forecaster proficiency, 8863
 Kerslake, William R., oxide-cathode durability in mercury electron-bombardment ion thruster, 6867
 Kessler, E. L., design for control of projectile flight characteristics, engineering design handbook, 1751
 Kessler, Edwin, on continuity of water substance, 15231
 Kessler, T., spark-source mass spectra of several aromatic hydrocarbons using spinning electrode, 11380
 Kesten, A. S., radiant heat transfer in fuel region of gaseous nuclear rocket engine, 5153
 Ketchum, Harry W., address, Feb. 1, 1967, 5807
 Key deer, *see* Deer.
 Key to meteorological records documentation, 6227-28, 13990, 16536
 Key West National Wildlife Refuge, birds of Florida Keys national wildlife refuges, list, 17780
 Key word in context, *see* Indexes.
 Keyes, Ian W., New Zealand artifacts from U.S. transit of Venus expedition, 6972
 Keyes, William F., mineral industry of South West Africa, 8364
 Keys, *see* Locks and keys.
 Keyserling, Leon H., how well is employment act of 1946 achieving its goal? 5043
 Keyserling, Mary D.:
 addresses, etc.—
 July 27, 1966, 1668, 10142, 17296
 Jan. 25, 1967, 8798
 June 17, 1967, 11908
 Khabarovsk, Russian SFSR, medical institute, recent developments, 2450
 Khar'kov Scientific Research Institute of Prosthesis, Orthopedics and Traumatology
 Imeni M. I. Sitenko, anniversary, 9667
 Kidnaping, laws, compilation, 1982
 Kidneys:
 airmen who apply insecticides from aircraft may suffer ill-defined effects, 17410
 renal blood flow, effect of hydrazine, preliminary study, 11967
 renal disease and hypertension, Public Health Service cooperative studies, conferences, proceedings, 17160
 renal function, effects of monomethylhydrazine, 15901
 renal response of man in oxygen-helium atmosphere, 87
 salmonid fishes, bacterial kidney diseases, 4802
 sodium and water excretion and renal hemodynamics during lower body negative, 14770
 see also Artificial kidneys.
 Kieffer, L. J., bibliography of low energy electron collision cross section data, 8521
 Kier, Porter M.:
 echinoids of Dominica, 5316
 new echinoid from Cretaceous Pierre shale of eastern Wyoming, 2363
 Kiernan, Owen B., statement, Oct. 5, 1966, 14853
 Kiewit, J. L., synthetic resin primer for coal-tar enamel, 10073
 Kil Ja Chung, *see* Chung, Kil Ja.
 Killing unwanted West Indies mahogany trees by peeling and frilling, 12573
 Kiln-drying, *see* Kilns.
 Kilns, dried softwood lumber, dimensional changes after surfacing and during storage, 2300

Kilpatrick, Jack F., Muskogean charm songs among Oklahoma Cherokees, 6978
 Kim Bong Oh, *see* Bong Oh Kim.
 Kim Kap Yung, *see* Yung, Kim Kap.
 Kim Kin Soon, relief, 542
 Kim, Yung Mi, relief, 353
 Kimbell, Charles L., mineral industry of Argentina, 15466
 Kimel, William R., radiation shielding, etc., applied to nuclear defense planning, 4384
 Kincaid, John F.:
 addresses—
 Sept. 22, 1967, 16091
 Oct. 17, 1967, 17472
 Kindergarten, enrollment of children under 6, 10937
 Kinetics:
 cosine law in kinetic theory of gases, 9028
 excess solute precipitation in liquid sodium solutions, 5359
 fluorination of beryllium, 12928
 gas synthesis using recycle systems, 9790
 hydrate and freezing processes, 6446
 hydrate reaction, studies, 6447
 parameters of 6 ablation polymers, determination by thermogravimetric analysis, 9896
 properties, thermal decomposition of $KMnO_4$, result of CO_2 -irradiation, 11570
 thermoelectrical corrosion, USSR study, 1241
 see also Chemical reactions.
 King, A. E., electrical component technology for space power systems, design studies, 15964-965, 17399
 King, Danny L., hydraulic model studies for Morrow Point Dam, 18103
 King, David A., activity patterns of campers, 8071
 King, Edward G., thermodynamic properties of forsterite and serpentine, 11387
 King, Joseph H., models of trapped radiation environment, low energy protons, 16929
 King, Norman D., Ryukyu Islands, bibliography, 10267
 King, Warren B., application of automatic data processing to study of seabirds, numerical coding, 14536
 King, Willis, Division of Fishery Services, annual report, 16925
 King Cove, Alaska:
 harbor, engineer report—
 departmental edition, 9420
 document edition, 9180
 King crabs:
 fisheries, agreement with—
 Japan, 7185
 Union of Soviet Socialist Republics, 11857
 Kingdom of Libya, *see* Libya.
 Kingdom of Morocco, *see* Morocco.
 Kings Canyon National Park, map, 5321
 Kingsley, Neal P., pulpwood production in Northeast, 4857, 8122, 14146
 Kingsolver, John M., bibliography of insect-plant associational studies, 8804
 Kinkel, Arthur R., Jr., Ore Knob copper deposit, N.C., and other massive sulfide deposits of Appalachians, 15310
 Kinnen, Edwin:
 Lyapunov functions—
 for nonlinear differential equations, 5180
 from auxiliary exact differential equations, 11421
 Kinney, Edward C., annual report, 1965, Division of Fishery Service, 17784
 Kinney, Jo Ann S., color induction using asynchronous flashes, 12794
 Kinney County, Tex., soil survey report, 11806
 Kiowa County, Colo., Big Sandy Creek Valley, geology and ground-water resources, 11191
 Kirby, James G., crude petroleum and petroleum products, 5101

INDEX 1967

- Kollar, 17417
Kollman AET,
Kollmeys radially
10448
Kolodziej rador
Kolomey bench
Kolomey relat
Kolosev fects
Komar ener
14533
Komer prog
Komm tran
Komm tran
Komoto torry
Konev sear
Konev cow
Konkili view
Koon K
Koont syst
env
Koote env
Cot
- 1
Kope to-
Kora list
Kord
XI
Ale
ba
m
No

R

Ko
Ko
Ko
Ko
Ko

- Kollar, K. L., regional construction requirements for water and wastewater facilities, 17417
- Kollmann, George, mechanism of action of AET, protection of DNA against ionizing radiation by GED, 5713
- Kollmeyer, Ronald C., oceanography of Labrador Sea in vicinity of Hudson Strait, 10445
- Kolodrubetz, Walter W., private employee-benefit plans, 8689
- Kolometrousis, Maria, relief, 13616
- Koloseus, H. J., free-surface instability correlations and roughness concentration effects on flow, 4892
- Komar, Charles A., effects of ultrasonic energy on fluid flow in porous media, 14336
- Komer, Robert W., other war in Vietnam, progress report, 1627
- Kommunist (periodical): translations, 3947
- Kommunist Moldavi (periodical): translations, 11273
- Komons, Nick A., science and Air Force, history of Air Force Office of Scientific Research, 7335
- Konev, I., reminiscences on battles for Moscow, USSR studies, 1287
- Konkle, Ward W., agricultural science review, 3001
- Koon Chew Ho, see Ho Koon Chew.
- Koontz, W. A., multipurpose data acquisition system for instrumentation of nearshore environment, 16522
- Kootenai Indians:
Confederated Salish and Kootenai Tribes of Flathead Reservation, funds, disposition—
law, 10480
reports, 7779, 9115
- Kopelson, Sheldon, rate augmented digital-to-analog converter, 18036
- Koral, Kenneth F., high-voltage characteristics of large-gap coaxial-cylinder electrode, 9908
- Kordes, Eldon E., preliminary evaluation of XB-70 airplane encounters with high-altitude turbulence, 18038
- Korea:
background notes, 10092
military personnel of U.S., helpful hints, Army pamphlet, 14798
- North—
mineral industry, minerals yearbook chapter, 1402
translations, 3963
- Republic—
agricultural commodities, agreement, 8747, 17229
cotton textiles, trade, agreement, 7183
exchange of official publications, agreement, 5543
foreign trade regulations, 16106
loan of additional destroyer, report, 16271
- Peace Corps, volunteers, agreement, 2928
- status of Korean Service Corps, agreement, 11864
- U.S. Armed Forces, facilities and areas and status, agreement, 8726
- sailing directions, change, 11649
- South, see above, Republic.
- Korean Service Corps, status, agreement, 11864
- Korean War, 1950-53, Marine Corps Reserve mobilization, 17906
- Korman, Samuel, some new metal and metal-ceramic composites, 5194
- Korniliev, Nicholas A., notes on Aradidae in National Museum, 4, Hemiptera: Heteroptera, 5307
- Kornicker, Louis S.:
Euphilomedes arostrata, new myodocopid ostracod, 6954
- Kornicker, Louis S.—Continued
myodocopid ostracod families Philomedidae and Pseudophilomedidae, 6963
- myodocopid ostracod from:
Great Bahama Bank, 8543
Red Sea, 5315
species of Sarsella (Ostracoda: Myodocopa), 6971
- Korth Transfer, accident, 1153
- Kosmahl, H. G., three-dimensional plasma acceleration through axisymmetric diverging magnetic fields, etc., 5256
- Kosmos, see Satellites.
- Kossoria, M. D., work performance of physically impaired workers, 14612
- Kost, Keith, public health reports, 3782
- Kotok, E. S., tree characteristics influence 2 x 4 stud yield of lodgepole pine, 16654
- Kousoulas, Angelique, relief, 16181, 17529
- Kovachna, T. A., kinetics of excess solute precipitation in liquid sodium solutions, 3359
- Kovar, Mary G., charges for care in institutions for aged and chronically ill, 17169
- Kowalczyk, George I., Arkansas Titan II missile site disaster actuarial analysis of survivor benefits payable, 7115
- Kraft, Ivor, helping low-income families through parent education, survey of research, 10402
- Kramer, Fritz, pressure effect of sound wave on cryogenic fluid, 12940
- Kramer, Morton, usage of psychiatric facilities for community mental health programs and related research, 5465
- Krascella, N. L., absorptive properties of small particles and heavy-atom gases, 5182
- Krasnolask Dam, hydroelectric projects, bibliography, 8665
- Krebill, R. G., Gymnosporangium clavariiforme in witches'-brooms of Juniperus communis, 8809
- Kreichelt, Thomas E., air pollution aspects of tepee burners, 1572
- Kreiflow, K. W., lawn diseases, how to control them, 11981
- Krejsa, Eugene A., frequency response of forced-flow single-tube boiler, 12952
- Krickich, Joseph:
mineral industry of—
New Jersey, 1401
Ohio, 6663
- Krill, see Plankton.
- Krislov, Joseph, State and local government retirement systems, etc., 2868
- Kroll, John, general purpose airborne simulator, 5161
- Krombein, Karl V., trap-nesting wasps and bees, 8685
- Kromer, George, W.:
fatty acids, expanding market for fats and oils, 10921
talks, Nov. 17, 1966, 4704-5
- U.S. cottonseed industry adjusting to short 1966 crop, 989
- Kronenberg, Stanley, high-intensity radiation dosimetry with SEMIRAD, 4219A
- Kronfeld, Sylvia, relief, 562
- Krueger, Kenneth W., investigating dominance in Douglas-fir stands, 16662
- Krueger, R. E., selecting hydraulic turbines, 2847
- Krueger, Roger C., factors influencing heat transfer to liquid-propellant rocket-thrust-chamber coolant channels, 1484
- Krug, Mary M., Smithsonian torch, 8684
- Krugman, Stanley L.:
artificial ripening of sugar pine seeds, 4856
freezing spring temperatures damage knobcone pine, 8117
- Krull, Walter V.:
planning layout and arrangement for safety, 8292
responsibility for safety, 8287
- Krusos, J. N., ceramic heat shields for lifting reentry vehicles, 15509

INDEX 1967

Krypton isotopes, krypton-85, development as universal tracer, final report, 13335
 Krzykowski, Kazimierz (Casimer): relief, 781
 Krywicki, Harry J.: body composition of military population, Ft. Carson, 1963, body density, fat and potassium 40, 120
 metabolic aspects of acute starvation body composition changes, 7412
 Ku, Marshall, relief, 532, 570
 Ku, Yuoh, factors affecting efficiency of chemically defined diet, 17351
 Ku Klux Klan: organizations, investigation—hearings, 10680
 print additional copies, reports, 10595-596
 report, 16250
 Kubal, Gene J., cooperation in agriculture, 1954-64, list of selected references, 1517
 Kuehn, Donald M., attached and separated boundary layers on highly cooled, ablating and nonablating models at M.13.8, 12954
 Kugel, Robert B., children of deprivation, changing course of familial retardation, 8966
 Kuhn, R., atlas, water masses and density stratification, western north Atlantic Ocean, 11629
 Kuhns, Helen P., nuclear energy for water desalting, bibliography, 12014
 Kulu Island, stratigraphy, 12600
 Kuklis, Andrew, mineral industry of Missouri, 6659
 Kulke, Bernhard, millimeter-wave generation with electron-beam devices, etc., 6854
 Kumal, Motol, hexagonal and cubic ice at low temperatures, 17375
 Kunde, Virgil G., outgoing infrared radiance from planetary atmosphere, 14457
 Kundert, James J., captioned films for the deaf program, 10929
 Kung-Lee Wang, see Wang, Kung-Lee.
 Kunlun Mountains, journey by Mikhail Vasil'yevich Pertsov, 15426
 Kunz, H. R., vapor-chamber fin studies, transport properties and boiling characteristics of wicks, 14379
 Kuo-Hua Yang, see Yang, Kuo-Hua.
 Kupper, Hubert J., relief, 778
 Kurepanof Islands, stratigraphy, 12600
 Kurkowski, Richard L., piloted simulation study of manual guidance of upper stages of large launch vehicle, 9887
 Kurtenacker, R. S., Appalachian hardwoods for pallets, laboratory evaluation, 16661
 Kurylo, Walter, remarks, Dec. 5, 1966, 1962
 Kurzhals, Peter R., approximate solution of equations of motion for arbitrary rotating spacecraft, 18054
 Kusler, David J., mineral industry of Virginia, 6669
 Kussoy, Marvin I., hypersonic viscous drag on cones in rarefied flow, 12949
 Kutscher, Ronald E., 1970 input-output coefficients, 17891
 Kuwait: alien amateur radio operators, authorization to operate agreement, 2901
 geology, 6406
 mineral industry—Kuwait-Saudi Arabia Neutral Zone, minerals yearbook chapter, 5112
 minerals yearbook chapters, 2556, 8356
 Kwajalein Missile Test Site, contractor operated missile and merchandising services, new procedures adopted to improve management, Defense Dept., GAO report, 14155
 KWIC, see Indexes.
 Kwok-Long Chan, see Chan, Kwok-Long.
 Kyser, James E., tracer-spark technique for flow-velocity measurements, 12856

L

L series, 16053
 Labels: adhesive, use for price-marking cases at grocery warehouse, 10155
 catalog of copyright entries, 12434, 17684
 fair packaging and labeling act, law, 12157
 foods, private labels, frequency of use by distributors, errata, 9947
 hazardous substances labeling act, amend—
 hearings, 2112
 law, 466
 text as amended, 12563
 luncheon meats, what label means, 966
 national potato labeling act, hearing, 17649
 Labidocera, see Copepods.
 Labin, Suzanne: techniques of Soviet propaganda, study, 12322
 print as Senate document, report, 12372
 Labor: American, impact of imports and exports—
 hearings, 6034, 16242
 report, 16256
 Bulgaria, new pay scales for scientific and technical workers, 1303
 civil defense role, State, county, and local, labor leaders briefing guide, 16055
 code of Federal regulations, 7982, 9468-80
 conditions—
 Algeria, 1364
 Angola, 1376
 Basutoland, 6617
 Bechuanaland, 1366
 Burundi, 6618
 Cameroon, Federal Republic of, 1367
 Central African Republic, 1368
 Chad, Republic of, 1369
 Congo (Brazzaville), Republic of, 1370
 Congo (Kinshasa), Democratic Republic of the, 1371
 Dahomey, Republic of, 1372
 Ethiopia, Empire of, 1373
 Equatorial Guinea, 5073
 French Somaliland, 5074
 Gabon, 2509
 Gambia, 1374
 Ghana, Republic of, 2510
 Guinea, Republic of, 5075
 Ivory Coast, Republic of, 1375
 Kenya, 1376
 Liberia, Republic of, 1377
 Libya, Kingdom of, 1378
 Malagasy Republic, 2511
 Malawi, 1379
 Mali, Republic of, 1380
 Mauritania, Islamic Republic of, 1381
 Mauritius, 1382
 Morocco, Kingdom of, 1382
 Mozambique, 1384
 Niger, Republic of, 1385
 Nigeria, Federal Republic of, 1386
 Portuguese Guinea, 5076
 Réunion, 5077
 Rwanda, 8320
 Senegal, Republic of, 2512
 Seychelles, 5078
 Sierra Leone, 2513
 Somali Republic, 1387
 South Africa, 2514
 South West Africa, 2515
 Southern Rhodesia, 1388
 Spanish Sahara, 5079
 Sudan, Republic of, 2516
 Swaziland, 1389
 Tanzania, United Republic of, 2517
 Togo, 2518
 Tunisia, 2519
 Uganda, 1390
 United Arab Republic (Egypt), 1391
 Upper Volta, 2520
 Zambia, Republic of, 1392

JANUARY-DECEMBER

Labor—Continued

contemporary international Communist workers, and national-liberation movement, USSR studies, 5003-4
 core city worker and plant relocation, 16711
 developments abroad (periodical), 3465
 displaced pottery and carpet mill workers, case studies of layoffs in small communities, 1360
 engineers, scientists, and technicians, current market, 4727
 how to train workers on the job, 5718
 industrial characteristics of workers, affiliations by age, race, class of work, etc., census of population, 1960, 13403
 industrial workers, training, USSR studies, 16752
 interindustry mobility in United States, 13119
 international labor (periodical), 3436
 issues in mid-60's, 8321
 labor courses, Civil Defense Office references, 14845
 labor digests, 1364-92, 2509-20, 5073-79, 6617-18
 African countries, 8316
 labor force—
 employment, and unemployment, 15452
 monthly report, 3232
 labor statistics 1967, handbook, 14302
 labor's role in war on poverty, seminar, 11299
 Main Pharmacy Administration of Moldavian SSR, proposals for improving labor organization, 15422
 man-hour output, indexes—
 private economy, 8319, 11333
 selected industries, 6612
 steel industry, 5055
 manpower policy, labor's view, seminar proceedings, 14279
 medical care utilization by disabled workers, 17202
 migration of talent and skills, some facts and figures, 14681
 migratory, study, authorization, report, 6080
 mobility, selected references, 15432
 monthly labor review, 3576
 reprints, 2521, 5081, 14305, 16827
 New England labor and economy, 1966, year-end report, 16828
 older workers, job redesign, 10 case studies, 8303
 Operation Late Start, how on-the-job training gives new hope to older workers, 16791
 participation in civil defense, 197
 periodicals, coverage of labor world, list, 1363
 physiological basis of methods of increasing labor productivity, USSR study, 16766
 potential supply and replacement of rural males of labor force age, 1721
 promoting worker interest in safety, instructor outline, 8288
 psychophysiological analysis of labor activity, USSR study, 11260
 racketeering activities of Jack McCarthy, etc.—
 hearings, 2119
 report, 10731
 relationship of education to labor (address), 6589
 requirements in thinning Douglas-fir and western hemlock, 4837
 role in State, county, and local civil defense, training course, instructor's guide, 198
 scientific organization—
 contributions of scientists, USSR study, 16767
 use in higher education, USSR study, 16776

Labor—Continued

statistics, interstate conference, proceedings, 15454
 Turkish labor movement, 1918-63, 5016
 USSR—
 labor force, 1950-75, estimates and projections, 12090
 studies, 6530
 translations, 3971
 work stoppages, monthly, 4070
 worker attitudes in job seeking, 1021
 workers—
 accidental ozone poisoning, prevention, 2820
 Martin Company, Denver, Colo., reemployment experiences, effects of defense employment readjustments, 5720
 physically impaired, work performance, 14612
 promoting interest in safety programs, 9704, 16804
 Republic Aviation Corporation, Farmingdale, Long Island, post layoff labor market experiences, 5719
 see also Child labor—Farm labor—Forced labor—Manpower—also headings beginning Labor.
 Labor and Public Welfare Committee, Senate:
 additional professional staff members and clerical assistants, authorization, report, 6081
 calendar, 3409
 committee prints, 4650, 4653, 6120-22, 10861, 10865-867, 12422, 13879, 17668
 hearings, 959, 2133, 4651-52, 6123, 7823, 9325-28, 10859-860, 10862-864, 10868-869, 12419-421, 12423, 13877-878, 15170-172, 16426-428, 17663-667, 17669-670
 investigations and studies—
 education, etc., of Indian children, authorization, report, 15137
 migratory labor, authorization, report, 6080
 poverty—
 authorization and expenses, report, 6079
 expenses, report, 15136
 hearings, 10860
 reports, 874, 898, 914, 7784, 9279, 10736, 10792, 12364-366, 13905, 13809, 15080, 15125, 16364, 16366
 Labor Department:
 annual report, 8281
 appropriations, 1967, law, 491
 appropriations, 1963—
 hearings, 9144, 10631, 13841
 reports, 10612, 15082, 16287
 Assistant Secretary, nomination of Thomas R. Donahue, hearing, 7823
 guidelines and conditions for grant and contract research, 6591
 financial management practices, GAO review, 8147
 Library—
 general periodicals currently received, 5034
 list of recent additions, 8866
 press releases, 3740
 program reports, 16791-792
 publications—
 list, 3624
 1961-June 1966, subject listings, 6595
 safety programs—
 chemical safety data sheet, CDS IS series, 9682-83
 off the job safety, OJS LS series, 16810
 safety training programs—
 how to inspect chart, HTIC LS series, 9684-95, 11308
 effective use suggestions, 11307
 occupational safety aid, OSA LS series, 9697-9720, 12766
 occupational safety charts, 9721-27

INDEX 1967

Labor Department—Continued
 safety training programs—continued
 student reference, SR IS series, 6602,
 9731-32
 technical reference, TR IS series, 9733-
 41
 Under Secretary, nomination of James J.
 Reynolds, hearing, 7823
 unemployment taxes, benefits from quar-
 terly collection, GAO review, 8135
 wage rate determinations for construction
 of Carters Dam, Ga., GAO review, 4878
Labor disputes:
 airlines and employees, settlement, report,
 874
 emergency board report—
 Long Island Railroad Company, 13966
 National Railway Labor Conference,
 9415
 Pan American World Airways, Inc., 4724
 railroad carriers and their employees—
 amend railway labor act—
 law, 9040
 reports, 9112, 9279
 extend period under railway labor act—
 law, 10482
 message from the President, 10511
 reports, 10567, 10736
 negotiations to ward off strike, etc.,
 message from the President, 9074
 provide for settlement—
 hearings, 10660, 10868
 law, 13534
 reports, 12259, 12267, 12364, 13667
 status of negotiations, hearing, 9328
 summary of situation, etc., message
 from the President, 10514
see also Strikes and lockouts.
Labor force, see Labor.
Labor hygiene, see Hygiene.
Labor hygiene and occupational diseases
 (USSR periodical):
 translations, 1244-45, 4992, 5005, 6491
Labor laws:
 and practice in—
 Brazil, 11309
 Ethiopia, 5054
 India, 8300
 Israel, 16812
 Lebanon, 2495
 and their administration, convention pro-
 ceedings of International Association of
 Governmental Labor Officials, 11301
 Federal, current, with 1789-1966 legisla-
 tive action, 10647
 Federal legislation to end strikes, docu-
 mentary history, 10861
 labor law series, 5047-50, 9696
 legislation enacted in 1966, 5052
 National Labor Relations Board, case de-
 velopments, quarterly report, 3799
 private-household workers, Illinois, fact
 sheet, 10137
State—
 affecting women—
 Delaware, 8794
 Ohio, 11912
 summary, 11907
 against discrimination in employment,
 summary—
 because of age, 5050
 fair employment practice act, 5049
 child labor laws, summary, 5047
 of special interest to women, legislation,
 1966, highlights, 11911
 State and Federal, legislation, 1965, 1966,
 annual digest, 14281
see also Child labor—Employers' liability
 and workmen's compensation.
Labor legislation, see Labor laws.
Labor management relations, see Industrial
relations.
Labor-management reporting and disclosure
 act of 1959:
 electing union officers as prescribed in
 title 4, etc., requirements, 8286

Labor-management reporting and disclosure
 act of 1959—Continued
 reporting and bonding provisions, admin-
 istration and enforcement, Labor-Man-
 agement Services Administration, Labor
 Dept., GAO review, 8141
 summary of operations, 6598
 technical assistance aid (series), 8286
Labor-Management Services Administration,
 welfare and pension plans disclosure act
 and labor-management reporting and dis-
 closure act of 1959, reporting and bond-
 ing provisions, administration and en-
 forcement, GAO review, 8141
Labor market, see Labor.
Labor organizations, see Labor unions.
Labor relations, see Industrial relations.
Labor standards:
 fair labor standards act—
 agriculture sharecropping arrangements
 or landlord-tenant agreements, em-
 ployer-employee relationship, guide,
 13176
 amend, hearings, 16323
 amend to require Secretary of Labor to
 investigate effect of foreign compe-
 tition on domestic employment,
 etc.—
 hearings, 6034
 reports, 16242, 16256
 amendments of 1966—
 agriculture, minimum wage provi-
 sions, application, hearing, 7732
 basic provisions, extent of coverage,
 economic effects, 17289
 legislative history, printing, report,
 10591
 application to—
 construction industry, 2969
 contract mail carriers, 7226-27
 equal pay for equal work, 11897
 hospitals and nursing homes, 1663
 hotels, motels, restaurants, and food
 service employees, 7225
 laundries and dry cleaning establish-
 ments, 1604
 minors employed in agriculture, 10132
 overtime pay, computing, highlights,
 11895
 retail and service enterprises and
 establishments, 8788
 schools, 10131
 soft drink industry, 17290
 wholesale grocery business, 11896
 child labor provision, guide, 8785
 defining terms, executive, adminis-
 trative, professional, etc., 1665
 employment of homeworkers in indus-
 try, 15819
 equal pay provisions, 7224
 message to young workers, 8787
 questions and answers, 17291
 handicapped clients in sheltered work-
 shops, wage payments, technical re-
 port, 18252
 handy reference guide, Spanish edition,
 5590
 how to keep time and pay records, pro-
 visions, 8786
 joint employment relationship, 13178
 quick look at hours worked under act,
 11898
 records to be kept by employers, 11899,
 13179
 reports to Congress as required by sec.
 4(d), 2971, 7228
 retail trade, minimum wage and maxi-
 mum hours, study to measure effects of
 1961 amendments, 5591
 text, with amendments, 2970
 fair labor standards foreign trade act,
 reports, 16242, 16256
Hospital and Medical Facilities Division
 projects, questions and answers, 8634
 provisions for Public Health Service Con-
 struction grant programs, 8637
 safety standards (periodical), 3845

Labor Standards Bureau :
bulletins, 1357-58, 5046, 6599, 8287-99, 9681, 9742-46, 11301, 14280-281, 16797, 17887
safety standards (periodical), 3845

Labor Statistics Bureau :
BLS report series, 2492-95, 5054-55, 8300, 11309, 12705, 14282, 15437, 16812-813, 17890-891
bulletin, 2496-2508, 1359-62, 5056-71, 6604-13, 8301-17, 11310-330, 12769-774, 14283-303, 15438-450, 16814-822, 17892-897
information system, search statement manual, 15436
NE regional reports, 16828
periodicals, coverage of labor world, list, 1363
publications, catalog, 8318, 17898
surveys and studies, methods used, handbook, 2497

Labor Statistics, Interstate Conference on, *see* Interstate Conference on Labor Statistics.

Labor surplus, *see* Unemployed.

Labor turnover :
factory, monthly release, 3259
measurement, 16826

Labor unions :
conventions, 1967, list, 14306
directories, national and international in U.S., changes, 2498
fallout shelters, civilian defense, how does it affect you? 4383
labor-management reporting and disclosure act, electing union officers, requirements, 8286
local-transit operating employees, wages and hours, 14300
local union election appeals, analysis, 6502
motortruck drivers and helpers, wages and hours, 15444
scientific labor organization proves effective at Siberian mining institute, 14263
unions and changing status of women workers, conference, 5608
welfare and pension plans disclosure act—amend with respect to filing of copies and making affidavits, hearings, 4531
questions and answers, 14278
see also Fishermen's and fish shore workers' unions—*also* names of unions.

Laboratories :
clinical, improve performances—
hearings, 12305, 17670
reports, 16230, 16247
Federal, utilization of resources, case study, 4537
Food and Drug Administration, sites, selection procedures, hearing, 15032
independent, conditions for medicare coverage of services, 5502
instruments, industrial plant equipment handbook, 4673
laboratory studies of open-channel flow (series), 4892
mass rearing fall armyworm, 8805
measurement of meteor luminous efficiency, 14111
packaged disaster hospital laboratory, 2823
procedures in blood banking and immunohematology, 3745
tests to confirm acceleration of slash decomposition by chemical treatment, 8086
Ukrainian, scientific laboratories, research gains noted, 14235
see also Research laboratories—Testing laboratories—*also* names of laboratories, or places where located.

Laboratory animals, *see* Animals.

Laboratory apparatus and supplies :
Federal item identification guides for supply cataloging, supplements, 3289
inhalation anaesthesia of small laboratory animals, USSR study, 1288

Laboratory apparatus and supplies—Con.
research equipment, better management, procurement, and utilization in Federal laboratories, hearing, 15028
Laboratory aspects of syphilis, 18170
Laboratory arc furnace features, interchangeable hearths, 8392
Laboratory profile of 283 healthy male adults, 7347
Lavoritz, I. M., Federal programs for development of human resources, etc., 7590
Labrador, sailing directions, 13020
Labrador Sea, oceanography in vicinity of Hudson Strait, 10445
Labyrinth-type valve seat increases valve life by decreasing fluid velocity, 1444
Laccadive Islands, sailing directions, 17073
Lacey, Robert E., desalination by electro-sorption and desorption, 6445
Lacquer and lacquering, current industrial reports, 8169, 10357

Lactates :
anesthetized dog, hydrazine effect, 7359
excess, relation to oxygen deficit during hypoxia, 7355

Lactic acid, concentration in dogs under acute hypoxia, 1739

Lactic dehydrogenase, *see* Dehydrogenase.

Ladd, Harry S., chitons and gastropods (Haliotidae through Adeorbidae) from western Pacific Islands, 4890

Ladders :
adjustable, self-locking ladder includes optional work platform, 9834
safe practices, 9725

Lady, J. D., electricity, conductors and insulators, classification definitions, 18128

Laemmerzahl, Arthur J., sailing in Greece, 4440

Lafayette County, Wis., soil survey report, 1610

Lafferty, J. M., hot-cathode magnetron ion gauge, 5185

LaFrance, Hazel M., claims against U.S., 13580

Lagrange multipliers, explicit solution, on singular subarc of optimal trajectory, 16982

Lagrange problems with variable endpoint as optimal control problems, 14386

Laguna mining district, geology and uranium deposits, 8165

Lahore, Pakistan, Lahore Atomic Energy Center, program development (remarks), 4244

LaHue, Delmon W. :
evaluation of 4 inert dusts on wheat as protectants against insects in small bins, 8835
evaluation of malathion, synergized pyrethrum, and diatomaceous earth—as protectants against insects in sorghum grain in small bins, 11933
on shelled corn as protectants against insects in small bins, 36

Laird, Eugene E., relief, 833

Laird, William M., upper and lower bounds for eigenvalues of vibrating beams with linearly varying axial load, 2609

Lake, *see* name of lake, except when occurring as first word of name of town, etc.

Lake City, Minn., motor carrier accident, 4927

Lake currents, modification of nearshore currents by coastal structures, 8326

Lake Mead National Recreation Area, general information, 8558

Lake Oswego High School, teens sound off, faculty listens to students' serious evaluation, 17726

Lake States, *see* Great Lakes States.

Lake States Forest Experiment Station, publications, 1961-65 annotated list, 2288

INDEX 1967

Lake Survey (Army) :

- bulletin, 2523
- miscellaneous paper, 8326
- research reports, 12776, 16833

Lakes :

- America's small lakes, water pollution control and abatement, report, 14986
- anisotropic ice, ultrasonic pulse measurements, 1754
- Columbia River Basin, change of storage, 3907
- mountain, aerial photo techniques for recreation inventory, 14128
- pollution prevention and control, pilot programs, hearings, 16435
- see also* Great Lakes—*also* names of lakes.
- Lam, Yim Mei, relief, 16182, 17532
- Lamas, Juan F. A., relief, 342
- Lamb, Fred M., aspen wood characteristics, properties, and uses, review of recent literature, 14134

Lamb :

- in family meals, guide for consumers, 17319
- slaughtering, cutting, and processing on farm, 1690
- Lambert, Edmund B., mushroom growing in United States, 1687
- Lambert, Robert W., documents on disarmament, 1748, 15925

Lambs :

- crop, 7197, 14697
- 1960-64, revised estimates by States, 7297
- on feed, 5556-57, 5681, 8759
- Laminar flow, *see* Flow.
- Laminated materials :

 - elastomeric bearings in UH-1 helicopter tail rotor, evaluation, 17389
 - fiberglass laminates, liquid crystals detect voids, 16941
 - flexural behavior of large glued-laminated beams, 8104
 - honeycomb sandwich structures, detection of entrapped moisture, 11453
 - potting compounds for honeycomb sandwich fasteners, depth control, study, 6834
 - ultrasonic quality inspection of bonded honeycomb assemblies is automated, 2664
 - wear and friction of polymer laminates in liquid nitrogen, etc., 2693

- see also* Plastics.

Lamnidae, *see* Sharks.

- Lamps, Federal item identification guides for supply cataloging, supplements, 3289
- see also* Electric lamps.

Lanal :

- small-boat harbor at Manele Bay, Hawaii, additional funds—
- hearings, 12427
- report, 10732

Land :

- Alaska interior, land types, photo identification guide, 15287
- atlas of off-road ground roughness power spectral densities, etc., 4195
- capability classification, 1678
- challenge of land use (address), 15846
- conservation and utilization, amend Bankhead-Jones farm tenant act—
- law, 500
- report, 910
- cropland adjustment program—
- eligibility of farm acquired to replace farm transferred to agency having right of domain, report, 15087
- Greenspan way, general information, 5672
- cropland, 1964-65 conversion program, description and appraisal, 9388
- development handbook for title 10, mortgage insurance, 16575
- differential assessment of farmland near cities, experience in Maryland, 17712

Land—Continued

- facilitate exchanges with Forest Service for use of public schools—
- hearings, 16303
- report, 16275
- Federal participation in cost of airport projects involving donated land, GAO review, 15300
- forming, means of controlling surface water on level fields, 5642
- interstate sales full disclosure act, hearings, 17642
- La Jolla, Calif., donated by University of California, use for marine biological research laboratory, hearing, 746
- land use intensity, 8204
- miscellaneous transfers, hearings, 16303
- open space land planning and taxation, bibliography, 12627
- open-space land program, questions and answers, 4902
- ownership maps, 19th century, in Library of Congress, checklist, 16837
- planned use policy (address), 10158
- planning bulletin, 8204
- recreation, price escalation report, 8603
- Sandoval County, N. Mex., effects of treatment on runoff water supply, 6412
- soil conservation, devoted to wise use of resources (periodical), 3883
- State and privately-owned, protection within national forest protection areas, 4861
- use—
- crisis in suburbia, picture story, 11939
- trip generation analysis, guidelines, 15718
- zoning, aid to community resource development, 17326
- see also* Public lands—Soil conservation.
- Land banks, *see* Federal land banks.
- Land landing couch dynamics computer program, 15530
- Land Management Bureau :
- appropriations, 1968, hearings, 7734
- information bulletins, 8327-28, 15456-457
- need to resolve differences in procedures used by Federal timber management agencies in appraising timber offered for sale, GAO report, 4871
- press releases, 3741
- program briefings, hearings, 10655
- seasonal employment information, 2524
- Land operational facilities, 14565
- Land tenure, Rainy Lake Chippewa, beginning of 19th century, 6974
- Lander, Wyo., sale of land by Agriculture Dept., reports, 925, 7781
- Landers, William S., coking properties of selected Utah coals and blends, 11377
- Landing (aircraft) :
- altitude rate command system, 9997
- approach paths with rainbow optical landing system, 5346
- approaches—
- cross-pointer-type instrument display in landing with helicopter, 1488
- moving-map instrument display in landing with helicopter, 11531
- depth of flash optical system, 13032
- equipment, Federal item identification guides for supply cataloging, supplements, 3293
- heliport standard marking pattern, development study, 17734
- landing task in jet trainer with restricted fields of view, flight investigation, 11553
- shadow box optical landing system, 11680
- simulated, flight characteristics of supersonic transports during approach, 12926
- snow runways, role of sintering in snow construction, 15930
- use of displacement, flash, and depth-of-flash coded displays for providing control system information, 5354

Landing (aircraft)—Continued
winged missile model, water-landing characteristics, 9872
X-15, landing contact conditions, statistical analysis, 5271
XB-70, landing-contact conditions, statistical analysis, 11548
Landing (spacecraft), *see* Spacecraft.
Landing gear, tricycle, landing loads, analysis, 14472
Landis, B. J., wireworms on irrigated lands in the West, 10170
Landlords and tenants:
District of Columbia—
code, amend, hearings, 2113
tenants evicted from unsafe and insanitary buildings, make available for relocation payments, hearings, 2113
tenant supplement help for tenants, 12623
tenants' rights, legal tools for better housing, report on conference, 14277
Landmarks, *see* Historic sites.
Landrock, Arthur H., military applications of plastics and related materials, 12446
Landrum, Emma J., effect of skewed wing-tip controls on variable-sweep wing-fuselage configuration, 8487
Lands, *see also* Public lands.
Landscape:
development, general information, 14194
evolution and soil formation in southwestern Iowa, 14763
landscaping and scenic enhancement of Federal-aid highways, 1968 authorizations—
hearings, 15174
reports, 15126, 16272
Landslides:
earthquakes of Mar. 27, 1964, Seward, Alaska, effects, 11175
Mount Rainier landslide of Alpine origin, primary microbiological succession, 11119
Lane, Elizabeth, agricultural economics research, 2996
Lanford, Samuel T., shelter through architectural design, 8981
Lang, A. Scheffer, remarks, Jan. 19, 1967, 4451
Lang, Jean M., Zectran fed orally to mice, cholinesterase levels in blood determined, 16567
Lang, William E., simulation of deployment dynamics of spinning spacecraft, 14471
Langan, L. N., soil survey, Las Vegas and Eldorado Valleys area, Nev., 14662
Langbein, W. B., aeration capacity of streams, 9570
Langley lunar landing research facility, operational features, 6875
Langley Research Center:
commemorating 50 years of service to the Nation—
law, 17546
report, 17622
Langmuir probes, *see* Electric probes.
Language and languages:
bilingual education programs, Federal aid to local agencies, hearings, 15170, 16321
communicating by language, speech process, conference proceedings, 7061
disorders, causes, etc., 18178
instruction, financial assistance guidelines under NDEA, 13956
language ability, grades 7-9, 2186
language in Peace Corps, breaking sound barrier, 5378
microlanguage programming on Ural-4 computer and sorting on magnetic tape, USSR study, 12758
modern foreign, national defense education act—
institutes for advanced study, summer 1967, handbook for directors, 1003
loans to private nonprofit elementary and secondary schools for equipment and materials, 1007

Language and languages—Continued
national defense education act—
modern foreign language fellowships, program, 7905
title 6, language and area studies summer 1967, 1009
overseas activities in support of modern foreign language and area studies, 16506
see also Electronic computers—*also* names of languages.
Langway, C. C., Jr., stratigraphic analysis of deep ice core from Greenland, 13290
Langworthy, James B., neutron production by fusion in class of anisotropic plasmas, 5347
Lannen, Margaret A., additional interest earnings of OASDI trust funds resulting from changed interest rate provided in 1960 amendments, 7116
Lanner, Ronald M., phenology and growth habits of pines in Hawaii, 4854
Lansche, Arnold M., selenium and tellurium, materials survey, 16854
Lanthanum, metal, electrowinning and tapping, 2586
Lanzano, P., periodic solutions for restricted 3-body problem of celestial mechanics, 9813
Laos, mineral industry, minerals yearbook chapter, 11358-359
LaPage, Wilbur F.:
campground tramping & ground cover response, 14138
successful private campgrounds, 8110
La Porte, A. H., research on refurbishable thermostructural panels for manned lifting entry vehicles, 2605
Lappet moths, pine lappet, identification, etc., 8842
Lapping machines, vibratory, metallographic holding fixture permits polishing of soft metals on, 5155
Laramie County, Wyo., geology and groundwater resources, 8179
Larch:
western—
defect estimation in Blue Mountains of Oregon and Washington, 2289
forecasting seed crops, procedure, 4828
forests, productivity indicators, 9535
growth opportunities (paper), 4829
seedlings, insolation limits initial establishment, 14088
Lard, commercial production, 11879
Large, David B., resonances of thin-shell model of earth-ionosphere cavity, 2225
Larkin, L. C., marketing industrial molasses in U.C., 4699
Larsen, Lynn S., soil survey of Elbert County, Colo., eastern part, 1611
Larson, George L., Jr., motor carrier accident, 4927
Larson, K. H., distribution, characteristics, and biotic availability of fallout, Operation Plumbbob, 1812
Larson, Leonard P., mineral industry of Arizona, 6643
Larson, M. M., racial variation in ponderosa pine at Fort Valley, Ariz., 2315
Larson, Nellie G., books on cooperatives, general reading list, 12977
Larve, *see* names of insects, etc.
Laser modulators, 10.6, micron development, 12957
Lasers:
absolute frequency stabilization of laser oscillator against laser amplifier, 14444
accuracy of laser measurements improved by pulse autocorrelator electronic system, 16968
bibliography, 14407
bleaching effect in ZnS(Co) crystals under influence of ruby laser pulses, 9926
concept for using, to measure electron density in plasmas, 6807
create by use of highly ionized plasma, USSR study, 4998

INDEX 1967

Lasers—Continued

- design concepts using ring lasers for frequency stabilization, 11472
- development of optical waveguides and components, 15508
- Doppler flowmeter, measures gas velocity, 6847
- FM modulation of CW laser beam, 6710
- gas, errors, canceled with neon isotopes, 6226
- helium-neon, discharge parameter study, 17086
- high-power research, NRL progress, 1553
- materials research, 5344
- measuring system accurately locates point coordinates on photograph, 5154
- optic quantum generators, use in biology and medicine, prospects, USSR study, 12758
- optical superheterodyne receiver uses laser for local oscillator, 8753
- precision CW laser automatic tracking system investigated, 6791
- system generates single-frequency light, 16943
- see also Ruby laser.

Lasher, Lewis P.

LSD, the false illusion, 17791

Lasker, Mary, award presentation to (remarks), 1354

LASO, see Latin American Solidarity Organization.

Lassie, help her keep America beautiful (poster), 16648

Lastra, Jesus L., relief, 822, 9248, 13492, 13597

Las Vegas Valley area, Nev., soil survey report, 14662

Latches, safety door, for automotive vehicles, Federal standard, 6319

Late somatic effects of radiation, 10308

Late Start Operation, see Operation Late Start.

Lateral ring metal elastic wheel absorbs shock loading, 6821

Lateral stability, see Stability of aircraft.

Latex, monodisperse polystyrene latexes, method measures mean particle diameter, 8894

Latham, Earle E., soil survey, Metcalfe County, Ky., 7185

Lathes, veneer, how to inspect chart, 11308

Latin America:

- agricultural development, role of Inter-American Development Bank (remarks), 10121
- agricultural production for 20 countries, indices, 4700
- alliance for progress, support historic new phase—
 - hearings, 7747, 7807
 - reports, 7715, 9098
- Communist activities, 1967:
 - hearing, 12298
 - report, 12285
- economic and geographic translations, 3225
- food for progress—
 - agricultural development, report, 13701
 - report, print additional copies, report, 12241
- Government operations, review, 7770
- Latin American common market (remarks), 13468
- market profiles, 13455
- mineral industry, regional review, minerals yearbook chapter, 12813
- paperback books, bibliography, 12779
- press, abbreviations used, glossary, 12721
- social progress trust fund agreement with Inter-American Development Bank, protocol, 2913
- subcommittees attendance at meetings, authorization, report, 7718

Latin America—Continued

- summit conference—
 - understanding on behalf of U.S., recommendations, message from the President, 7610
 - welcoming etc., report, 10728
- United States foreign aid in action, case study, 2122
- Latin American Solidarity Organization, conference, July 28-Aug. 5, 1967, Senate Judiciary Committee staff study, 13872
- Lattice theories, see Crystal lattices.
- Lattu, Onnie P.:
 - remarks—
 - Dec. 14, 1966, 5366
 - Oct. 3, 1967, 17101
- Latvia:
 - Academy of Sciences, activities reviewed, 8250
 - Academy of Sciences, biographies of members, 1163
 - power engineering trends, 1235
 - State prize candidates in science and production, USSR announcement, 12683
- Launch vehicles, see Spacecraft.
- Launching facilities:
 - aircraft equipment, Federal Item Identification guides for supply cataloging, supplements, 3293
 - dynamic launch decision criteria, system automatically provides, 17974
 - space port traced in Zvezdograd, development, 1251
- Laundry and laundries:
 - field laundry operations, Army technical manual, 8885
 - hospital laundry, design and equipment, 7071
 - industry wage survey, 14298
 - sanitation in home laundering, 17317
 - under Fair labor standards act, as amended, 1664
- Laurel, Oscar M., nomination, hearing, 10823
- Lauriat, Patience, paper, Aug. 15-19, 1966, 1880
- Lauzardo, Esther Y., relief, 9232, 12238, 13497
- Lava Beds National Monument, general information, 17052
- Lavaples, Nermín D., relief, 305
- Laventhol, Jesse, major legislative actions, 90th Congress, 1st session, 9047, 13548
- Laventure, Louis, or heirs, relief, 610
- Law:
 - advocates for the poor, Legal Services Program, 6161
 - China, mainland, selected legal sources, guide, 11338
 - enactment—
 - procedural steps, 13720
 - procedure, print revised edition, report, 12369
 - Equal Employment Opportunity Commission, annual digest of legal interpretations, 12480
 - general interest, summary, 89th Congress, 4572
 - how our laws are made, 10520
 - reprinting, reports, 10589, 10788
 - JAG law review, 3453
 - Judge Advocate legal service, Army pamphlets, 3461
 - law and the deaf, 17183
 - law in action, legal services program of War on Poverty, 3466
 - legal aspects of PHS medical care, 1582
 - legal proceedings, testimony by employees and production of records, federal aviation regulations, 11005
 - legal services—
 - community action program, how to apply, 15203
 - fact sheet, Economic Opportunity Office, 4691
 - in action, the poor seek justice, 12449

Law—Continued

Legal Services Program—
annual report, Economic Opportunity
Office, 4690
guidelines, 16482
local law, application in military claims
in determining negligence, report, 12279
**Navy, Judge Advocate General Office, or-
ganization and functions, 15633**
newsmen's privilege, legal procedure, 2129
procurement legal service, Army pam-
phlets, 5737, 7389, 8883-84, 13300,
14790-800
publications, price list, 10037
slip laws (private)—
89th Congress, 250-359
90th Congress, 10476-479, 12143-154,
13474-521, 14884-905, 16122-127,
17490-535
slip laws (public)—
89th Congress, 360-514, 1970-71, 3783,
12155-163
90th Congress, 9031-40, 10480-490,
12164-185, 13522-541, 14906-915,
16128-145, 17536-561
Soviet law and social regulation, transla-
tions, 3967
State, compulsory school attendance,
summaries, etc., 2191
statutes, Government Operations Commit-
tee, House, 4538
subject index of regulations published in
Sbirka zakonu CSSR, Czechoslovakia,
15423
tenants' rights, legal tools for better
housing, report on conference, 14277
see also Codes of law—Criminal law—
Military law—Statutes at large—also
subjects.
Law enforcement:
agencies, activities relating to small busi-
ness, report, 4513
career opportunities, Treasury enforce-
ment agent, 5575
controlling crime through more effective
law enforcement, hearings, 15166
Federal assistance to State and local gov-
ernments—
act of 1963, activities under, report,
11292
amend act—
law, 502
reports, 635, 929
highway safety study, Operation 66, joint
engineering-enforcement, project report,
1594
housing codes in 6 Connecticut cities,
14852
law enforcement and criminal justice as-
sistance act of 1967, reports, 13670,
13685
local agencies, Secretary of Labor to col-
lect, etc., employment data, hearings,
16325
local officers killed while apprehending
Federal offender, provide compensa-
tion to survivors—
hearings, 15166
reports, 14976, 15110
major metropolitan areas, crime and law
enforcement studies, 13060
victimization and attitudes toward, in
D.C., 13058
**Law Enforcement and Administration of
Justice, President's Commission on, see
President's Commission on Law Enforce-
ment and Administration of Justice.**
Laws:
diseases, how to control them, 11931
weed control with herbicides, 15854
Lawrence, J. D., Jr., optical radar measure-
ments of atmosphere, 8420
Lawrence, Mass., area wage survey, 15440

Lawrence Radiation Laboratory, Livermore,
Calif., 15 years of achievement (remarks),
15970
Lawroski, Stephen, reactor fuel processing,
quarterly technical progress review, 3806
**Laws, see Codes of law—Labor laws—Law—
also subjects.**
Lawson-Dumont-Fall River mining district,
Colo., geology and ore deposits, 16683
Lawyers:
advocates for the poor, Legal Services
Program, 6161
career opportunities with Civil Aeronau-
tics Board, 16045
corporate voluntary balance of payments,
program and lawyer (remarks), 224
Federal attorneys, appointment records,
pamphlet to accompany microcopy
Idaho, Territory and State, 18071
labor relations role (remarks), 14525
legal careers in Federal government, 13447
pay, national survey, 2507
recovery of reasonable fees, amend inter-
state commerce act, hearings, 17645
Laycock, William A.:
comandra, grazing, and comandra blister
rust, 14127
distribution of roots and rhizomes in dif-
ferent soil types in Pine Barrens, New
Jersey, 6408
Laymon, Richard S., image interpreter map
displays, chip versus hard copy, 4224
Layout, equipment, and work methods for
school lunch kitchens and serving lines,
4121
Layout guidelines for peach packinghouses,
7247
Layouts, see Plants (Industrial).
Layton, Garrison P., Jr., flight tests of wide-
angle, indirect optical viewing system in
high-performance jet aircraft, 1497
Lazaro, Eric J., relief, 258
Lazarow, Arnold:
diabetes literature index, 3203
1966 index issue, 14621
LD, see Lethal dose.
Lea, Robert N., stability of numerical solu-
tions of ordinary differential equations,
5243
Lead, S. Dak., gold distribution in diamond-
drill core from Homestake Mine, 6679
Lead:
compounds, plate materials of lead-acid
cell, anodic oxidation, 11672
geology of upper Mississippi Valley zinc-
lead district (series), 6388
industry, mineral industry survey, month-
ly, 3467
in indium, determination, 9985
lead-silica glass, viscosity of standard
type, 1520
lead-zinc industry—
Pacific Northwest, analysis, 11352
stabilization—
hearing, 12413
report, 10752
lead-zinc sinter, complex, electric smelt-
ing, 14353
mine production, mineral industry survey,
monthly, 3468
minerals yearbook chapters, 2545, 5107
ores, domestic reserves and potential
sources, evaluation, 8340
tin-lead solders and solder joints, tests,
11388
zinc-lead district of upper Mississippi Val-
ley, aeromagnetic and tectonic analysis,
4888
see also names of articles manufactured
from lead.
Lead poisoning:
in children, 16042
mallards, test of grit types in alleviating,
17786

INDEX 1967

Lead sulfates, anodic oxidation of PbSO₄, etc., plate materials of lead-acid cell, 11672

Leadbetter, Sumner A., design and fabrication considerations for 1/10-scale replica model of Apollo/Saturn V, 16988

Leadership:

- Army Junior ROTC, training today for leadership tomorrow, 4193
- Army officers' call, theirs to reason why, 10940
- 4-H club entomology leaders' guide, 4134
- squad leaders, Army pamphlet, 11988
- take me to your leader (address), 10318
- USDA, for more beautiful countryside, 49

Leading edge, *see* Aircraft—Airfoils—Wings (aircraft).

Leaf, Charles F., sediment yields from high mountain watersheds, central Colorado, 2332

Leafhoppers, Western Hemisphere Balclutha (Homoptera: Cicadellidae), classification, 8047

see also Beet leafhopper.

Leaflets, *see* names of departments, etc., issuing leaflets—*also* subjects.

Leak, William M., report of NRL progress, 3821

Leak detectors:

- gas leak detector is simple and inexpensive 6827
- portable set discloses helium leak rates, 9833

Leaks:

- correlations for predicting leakage through closed valves, 17038
- cryogenic seal remains leaktight during thermal displacement, 12837
- face contact seal in liquid sodium performance improved in incorporation of spiral-groove geometry, 11505
- friction and leakage losses in blade-rings of turbines and turbine units, 5277
- helium leak testing of pipe welds, fixture to facilitate, 12904

Learn and train for job under MDTA, 13971

Learning:

- grouping as related to pupil learning, survey of research, 4721
- in action, selected issues in training and demonstration projects, 2973
- paired-associate experiments, confidence in recall, 13262
- programmed, Air Force manual, 8850
- psychology and the theory of learning, USSR study, 14268
- use of cuing in training tasks, phase 3, 15635

Leary, Richard J., blast furnace operation with natural gas injection and oxygen-enriched blast, 12828

Leases:

- air space in District of Columbia, authorize, hearings, 16407, 17598
- geothermal steam deposits, issuance of leases, hearings, 4546, 12411, 15037
- Gila River Indian Reservation, 99-year term, report, 12243
- Hualapai Indian Reservation, 99-year term, report, 12244
- Indian long-term leasing act, amend extending terms, etc., report, 15078
- leasing program for low income families, administered by local housing authorities, 2382, 11199
- long-term, on San Xavier and Salt River Pima-Maricopa Indian Reservations, law, 429
- oil and gas lease—
- New Mexico, reinstate, 530, 12324
- reinstatement, etc., by Secretary of Interior, hearings, 13708
- Wyoming, reinstate, reports, 10738, 10740

Leases—Continued

- oil lease, New Mexico, reinstate, 10704
- Post Office Dept. for real property, extend authority—
- hearings, 7827, 9165
- law, 10484
- reports, 10562, 10726
- San Carlos Apache Reservation, 99-year term, report, 12261
- Yosemite National Park, El Portal site, extend term, report, 15002

Least squares:

- method, analysis of gamma-ray spectra, computer program, 8630
- nonlinear regression and principle of least squares, evaluating constants and calculating variances and covariances, 6681

Leather goods, *see* Leather, hides, and skins.

Leather, hides and skins:

- hide trim pattern for domestic cattlehides, standard of trade, 5283, 8517
- leather goods, general repair, technical manual, 13302
- leather manufactures and allied products summary of information, 12029
- leather products, new developments (talk), 4703
- leathers, Federal Item Identification guides for supply cataloging, supplements, 3292
- new developments in hide and leather industry (speech), 12459
- personal leather goods, current industrial reports, 3169
- unhaling hides at packinghouse, economic aspects, 11934

Leave of absence:

- administrative leave to employees representing Government employee organizations, decision of Comptroller General regarding, 17610
- annual and sick leave act of 1951, amend to exempt from coverage of act officers and members of crews of vessels, hearing, 4553
- District of Columbia teachers leave act of 1949, amend relative to sick leave provisions, report, 14991
- Federal employees' administrative leave for hurricanes, etc., hearing, 748
- Federal seafaring employees, additional leave, law, 459
- Government employees not to be charged for absence as result of hostile action abroad, report, 10768
- Government officials and employees, FPM supplement, 3305
- uniformed service members voluntarily extending tour of duty in hostile fire area, authorize special 30-day period of leave—
- hearing, 716
- law, 443

Leaves, foliage plants, production and sales, etc., 10108

Lebanon:

- capsule facts for Armed Forces, 13282
- Israel armistice line, boundary study, 11829
- labor law and practice, 2495
- mineral industry, minerals yearbook chapter, 5113

LeBeau, Oscar R., ways farmers do business, 2229

LeBel, Peter J., sensors to obtain in-flight ablation measurements of thermal-protection materials, 1494

Lebowitz, A. I., mechanization of USAEC library, 1st legislative information, 5790

Lechtinase, *see* Phospholipases.

Lectures, *see* Addresses, lectures, etc.

Lederer, Paul S.:

- life cycling test on several strain gage pressure transducers, 18083
- methods for performance-testing of electro-mechanical pressure transducers, 6923

Lee, B. J.:
pitch control motor for launch escape system of Apollo spacecraft program, 15560
solid propellant rocket motor performance computer programs using group transformation method, 1483
Lee Duk Hee, relief, 13766, 16217, 17518
Lee, Edwin E., Jr., interaction effects of control jet exhausting radially from nose of ogive-cylinder body, 5237
Lee, George R., sport fishery abstracts, 3891
Lee, Henry A., low-speed dynamic-model investigation of Apollo command module configurations in Langley spin tunnel, 14452
Lee, Robert E., nomination, hearing, 13855
Lee, Robert S., ten-bit analog-to-digital converter, 11486
Leef, Albert E., dual-channel, VHF-UHF transmitter for Gemini experiment D-14, 10004
Lees, L., mixing parameter analytical method used for laminar separations, investigation, 9806
Leeward Islands:
 Antigua—
 Peace Corps volunteers, agreement, 13146
 tracking station, agreement with Great Britain, 8749
 St. Christopher, Nevis, and Anguilla, Peace Corps program, agreement, 11851
 Legal aspects of IHS medical care, 1582
 Legal procedures, see Law.
 Legal research, Project LITE (legal information through electronics), hearing, 15034
 Legal services, see Law.
 Legibility of alphanumeric characters and other symbols, 6917
Legislation:
 89th Congress, 2d sess., of interest to National Institutes of Health, summary, 7094
 major legislative actions, 90th Congress, 9047, 10494, 13548
 Public Works Committee—
 House, activities, 89th Congress, 6041
 Senate, activities and accomplishments, 89th Congress, 4658
 record, 89th Congress, 2d session, 767
 State—
 legislation of special interest to women, 1968 highlights, 10141
 program of Advisory Commission on Intergovernmental Relations, 15822
 see also Labor laws—Law—also subjects.
Legislative appropriations, see Appropriations.
Legislative reorganization act, see Congress of United States.
LeGrand, H. E., ground water of Piedmont and Blue Ridge provinces in southeastern States, 9566
Legumes, inoculation, what it is, what it does, 14739
Lehrman, Hal, rebellion in Russia's Europe, fact and fiction, print additional copies, report, 12373
Lei, Kenneth P. V.:
 electrolytic process for producing ductile vanadium, 12825
 molten-salt electrorefining vanadium scrap, 17916
Leiman, Martin, food retailing by discount houses, 5652
Leinenbach, Paul, selling in Denmark, 233
Leiss, Amelia C., arms control and limited war in developing areas, 15924
Leisure:
 changing cultural patterns, 5042
 time, leisure, and computer, crisis of modern technology (remarks), 5799
Lemke, Richard W., effects of earthquake of Mar. 27, 1964 at Seward, Alaska, 11175

Lempel, Michael J., determining heat-transfer characteristics for dilute gas-solids mixture in externally heated tube, 14326
Lending operations, see Loans.
Lendesty, Charles D.
 soil survey of Adams County, Wash., 18212
Lenin prizes:
 nominees listed, USSR article, 8252
 science and technology, recipients, 9657
Leningrad, Russian SFSR, Central Bureau of Technical Information services for technical progress, value, 6513
Leninism, see Communism.
Lens (eye):
 panels illuminated by edge-lighted lens technique, 5204
Lenses, welders' helmets, military standard, 9372
Lente, Joe E., artist of Isleta paintings in pueblo society, 14547
Leonard, J. T., hysteresis loop method to study thixotropic suspensions, 10005, 11679
Leonard, Olen E., low-income families in Spanish-surname population of Southwest, 9389
Leonard, Regis F., elastic and inelastic scattering of alpha particles from even tellurium isotopes, 11536
Leone, Oliver Q., electrorefining of titanium-nitrogen alloys, 2582
Leong, Roderick, evaluation of pump and reeled hose system for studying vertical distribution of small Plankton, 14065
Leonhardy, Henry P., relief, 318, 567, 847
Lepidoptera, see Microlepidoptera—Moths—Stenomidae.
Leshner, Richard L., assessing technology transfer, 2619
Lesions, colorectal polypoid lesions, 14772
 see also Choroidretinal.
Lesotho, see South Africa.
Les progrès de l'instruction publique aux Etats-Unis d'Amerique, 1966-67, 13955
Lessor, Clement, or heirs, relief, 610
Lethal dose, gamma radiation LD 50(30) for rabbit, 17347
Lethata, see Microlepidoptera.
Let's cook fish! complete guide to fish cookery, 9515
Let's face it, security is up to you, 10901
Letters, transportation restrictions, private express, statutes, 17120
Lettuce:
 film-wrapped and naked-packed, market quality, 10152
 head lettuce held in low-oxygen atmospheres, market quality and rate of respiration, 10180
 temperatures, relative humidity, and atmosphere composition in mechanically refrigerated car and trailer loaded with lettuce, 15825
 transit temperatures and crushing in transcontinental shipments, effect of load pattern, 11916
 western, shipped in piggyback trailers, nitrogen effect on transit temperatures and market quality, 5644
Leukemia:
 childhood leukemia, pamphlet for parents, 18157
 human, recent research on viroid etiology, Rumanian studies, 6549
 murine leukemia, conference, 1583
Leukosis, see Avian leukosis.
Levadi, Solomon S., claim against U.S., 784, 7639
Levesque, Richard J., time-optimal response of feedback control systems by means of discontinuous rate compensation, 16898
Levine, Gerald, relief, 7623
Levine, Milton, American science manpower, 1964, report, etc., 5323
Levine, Nathan, relief, 274, 807

INDEX 1967

Levinson, David, displaced pottery workers' adjustment to layoff, 1360
 Levison, William H., studies of multivariable manual control systems, 17934
 Levy hypoxia test, *see* Hypoxia.
 Lewallen, Jay M., modified quasilinearization concept for solving nonlinear 2-point boundary value problem, 12941
 Lewis, Alan G., copepod crustaceans parasitic on teleost fishes of Hawaiian Islands, 11603
 Lewis, Mark F., diagnostic tests of color defective vision, bibliography, 17411
 Lewis, Wayne C., thermal conductivity of wood-base fiber and particle panel materials, 14124
 Lewis and Clark Trail, development, etc., program promotion, report, 2526
 Lewis and Clark Trail Commission:
 appropriations, 1968—
 hearings, 7734, 9302
 law, 12170
 reports, 10560, 10766, 12252
 press releases, 3742
 report of activities, 2526
 Lhermitte, Roger M., probing balloon motion by Doppler radar, 16532
 Liability insurance, uninsured motorist coverage required part of every automobile liability policy, report, 13644
 Llamari, J. J., international coal trade, monthly inventory, 3433
 Liapunov method:
 application of Lyapunov stability theory to some nonlinear problems in hydrodynamics, 16915
 functions for class of n^{th} order nonlinear differential equations, 5180
 Lyapunov functions from auxiliary exact differential equations, 1421
 Libbey, Charles E., wind-tunnel investigation of static aerodynamic characteristics of 18-foot (5.49-meter) all-flexible parawing, 11488
 Libby, Paul A., heat and mass transfer at general 3-dimensional stagnation point, 12569
 Liberia:
 agricultural commodities, agreement, 2891
 background notes, 17214
 housing, basic information, 6421
 labor conditions, 1377
 mineral industry, minerals yearbook chapter, 6654
 Liberman, D. S., failure reporting and management techniques in Surveyor program, 14406
 Liberty:
 contemporary international Communist workers, and national-liberation movement, USSR studies, 5003-4
 outlook for freedom (address), 1629
 Librarians:
 examination announcements, 4404, 10417
 Veterans Administration installations, 10411
 library manpower, occupational characteristics of public and school librarians, 4713
 National Library of Medicine, library associate program, curriculum, qualifications, etc., 5302
 school library personnel, national defense education act, institutes for advanced study, summer 1967 handbook, for directors, 1003
 vacancy roster, Federal Government libraries, 3337
 Veterans Administration hospitals, nationwide career information, 18248
 Libraries:
 Air Force, buying calendar for annual publications, 8859
 Army technical library improvement studies, 10265

Libraries—Continued.
 college library resources program, grants for library materials, policies and procedures manual, 9405
 depository, law governing, and list of libraries, 7765
 depository libraries, list, 3568
 Federal Government, rosters of libraries and vacancies, 3337
 higher education act of 1965, administration of programs, 1966, notes and working papers, 12422
 It's the latest, it's the greatest, it's the li-ber-ee, bringing libraries to the people, 12466
 library and information science, research program, 7901
 library manpower, occupational characteristics of public and school librarians, 4713
 library services an construction act, extend and amend—
 law, general information, 1135
 report, 16298
 new serial titles—
 classified subject arrangement, 3626
 union list, alphabetical arrangement, 3627
 opportunities for health science libraries, 6941
 school, resources, acquiring under ESEA, guidelines, 16513
 statewide long-range planning, conference report, 1016
 technical library services, user's guide, Army pamphlets, 10265
 see also Bookmobiles—Children's literature—also names of departments, etc.—also names of libraries or places where located.
 Library accessions:
 Adjutant General's Office, Army Library, 3864
 Ceylon, American Libraries Book Procurement Center, New Delhi, 11337
 Federal Fire Council, list, 3511
 foreign statistical publications, 3350
 India, American Libraries Book Procurement Center, New Delhi, 3416
 Indonesia, American Libraries Book Procurement Center, Djakarta, 3419
 Interior Department, 3509
 Israel, American Libraries Book Procurement Center, Tel-Aviv, 3450
 Labor Department Library, 3866
 Middle East, American Libraries Book Procurement Center, Cairo, 3554
 Nepal, American Libraries Book Procurement Center, New Delhi, 3618
 Pakistan, American Libraries Book Procurement Centers, Karachi and Dacca, 3673
 Reclamation Bureau Library, list, 3504
 Russian, Library of Congress, monthly index, 3575
 Library Committee, Federal, *see* Federal Library Committee.
 Library list, National Agricultural Library, 1517, 8515, 14506
 Library of Congress:
 accessions—
 Ceylon, American Libraries Book Procurement Center, New Delhi, 11337
 India, American Libraries Book Procurement Center, New Delhi, 3416
 Indonesia, American Libraries Book Procurement Center, Djakarta, 3419
 Israel, American Libraries Book Procurement Center, Tel-Aviv, 3450
 Middle East, American Libraries Book Procurement Center, Cairo, 3554
 Nepal, American Libraries Book Procurement Center, New Delhi, 3618
 Pakistan, American Libraries Book Procurement Centers, Karachi and Dacca, 3673

Library of Congress:

- accessions—continued
- Russian, monthly index, 3575
- appropriations, 1968, legislative—
 - hearings, 10633, 12398
 - law, 13537
 - reports, 10677, 13672, 13813
- archive of recorded poetry and literature,
 - checklist, 5089
- calendar of events, 3072
- cataloging service bulletin, 3081
- catalogs—
 - books, subjects, 2520, 3505
 - dictionary, subject headings used, 3910
 - motion pictures and filmstrips, 3508
 - music and phonorecords, 15459
 - national register of microforms masters, 2550
- national union catalog, 3601
- annual cumulation, 1393
- manuscript collections, 2531
- register of additional locations, 16838
- classification—
 - additions and changes, quarterly list, 3464
 - class G, geography, etc., 5086
 - class L, education, 5087
 - class P, subclass PQ, French literature, 2527
 - class Q, science, 9749
 - class R, medicine, 5088
 - class U, military science, 2528
- collection of papers of—
 - Chambers, Washington Irving, 11340
 - Schurz, Carl, 8330
- information bulletin, 3421
- national reference library of children's books, 2532
- PL 480 newsletter, 3507
- President's papers Index series, 6623
- Public law 480 project, accessions list—
 - Ceylon, 11337
 - India, 3416
 - Indonesia, 3419
 - Israel, 3450
 - Middle East, 3554
 - Nepal, 3618
 - Pakistan, 3673
- publications in print, 11339
- publications, price list, 10041
- quarterly journal, 3795
- report, 1966—
 - departmental edition, 11336
 - document edition, 10500
- Library recordings, checklist of archive of recorded poetry and literature in Library of Congress, 5089
- Library science move the information, use of computers, etc., 14766
- Library services of National Clearinghouse for Smoking and Health, 11740
- Libya:
 - capsule facts for Armed Forces, 11978
 - labor conditions, 1378
 - mineral industry, minerals yearbook chapter, 6655
- Licciardello, J. J., effect of repeated treatment with gamma rays on radio-resistance, virulence and culture characteristics of certain pathogenic and related bacteria, 12018
- Lee:
 - amblyceran Mallophaga found on hornbills, 8541
 - Carrier on Mallophaga, posthumous papers, catalog of forms described as new, and bibliography, 15599
- eradication agents investigated, USSR study, 4967
- Licenses:
 - AEC licensing guide, 15957
 - drivers, statistics, 17176
 - export, approved and reexportations authorized, list, 3250
 - nuclear reactors, hearings, 12184

Licenses—Continued

- see also Liquors—also classes of persons to whom, or subjects for which, licenses are issued.
- Lichee, see Litchi.
- Lidar observations of Pre-Gondola I clouds, 17397
- Lie series, see Algebra.
- Liens:
 - established by judgment or decree by District of Columbia Court of General Sessions, recordation by recorder of deeds—
 - law, 1971
 - reports, 2026, 2102
 - establishment by judgment or decree by U.S. District Court for District of Columbia, report, 12385
 - Farmers Home Administration, release of valueless liens, etc., permit, report, 15090
 - Federal tax lien act—
 - law, 433
 - legislative history, 757
 - report, 656
 - masters of certain vessels for wages and disbursements, grants—
 - hearings, 10663
 - reports, 12250, 17632
- Liepins, Atis A., vibration study of pressurized torus shell, 16908
- Liesegang rings, bibliography, 15590
- Life:
 - processes—
 - effect of solar activity, USSR study, 1213
 - effects of radiation and radioisotopes, bibliography, indexes, 13343
 - Life cycling test on several strain gage pressure transducers, 18083
- Life insurance:
 - credit, for student loans, increase maximum amount allowable in D.C., report 882
 - Federal employees group act of 1954, amend, increasing coverage, etc., veto message, 4467
 - Federal employees group insurance—
 - annual report, 7540
 - FPM manual, supplement, 3302
 - increase coverage—
 - hearings, 6124, 10673
 - reports, 13662, 13806
 - veto, 16155
 - national service—
 - refunds, Philippine peso payments—
 - law, 372
 - report, 905
 - regular dividend schedules, 8780
 - servicemen's group life insurance program, annual report, 8778
 - veterans and servicemen, government programs, annual report, 8779
- Life insurance companies:
 - alien, operating in D.C., public announcement of financial condition, report, 16292
 - farm mortgage lending experience, 9395
 - income tax spin-off, report, 15093
 - nonfarm mortgage investments, 15241
- Life lines, U.S. sea lanes, impact of waterborne commerce on American industrial productivity, 8574
- Life protection series, FDA's, 9522-23, 12562
- Life sciences, research objectives, 1967, OAR, 7336
- Life spent in a favorite work, review of book, USSR, 1177
- Life support systems:
 - closed system, conference on problems, etc., 15515
 - integrated, contaminant producing materials within, environmental testing, 11416
 - space flights of extended time periods, 1425

INDEX 1967

- Life tables:**
National Center for Health Statistics, data, bound volume, 5444-45
State, 1959-61—
Alabama-Missouri, 5444
Montana-Wyoming, 5445
variance and covariance of functions estimated from sample of deaths, 8657
- Lift (aircraft):**
all-flexible parawing for landing lifting-body spacecraft, low-speed tests, 11550
vortex, of sharp-edge delta wings, concept based on leading-edge-suction analogy, 2726
VTOL aircraft with jet-ejector system for lift augmentation, wind-tunnel investigation, 2706
Lift fan technology studies, 11402
Lifting, safety, proper way to lift, 6601
Lifting bodies, 8430
Ligand molecules, *see* Molecules.
- Light:**
adaptation, homogeneous field, 4255
color modulation of stationary beam, 2628
electro-optic modulators, 1489
exposure of men to intermittent photic stimulation under simulated IFR conditions, 5802
induced free radicals in wood, 4846
insect trapping with, student, or classroom science project, 4136
intensity data of Trallblazer I reentry bodies, summary, 2690
intensity modulator withstands high heat fluxes, 2657
laser system generates single-frequency light, 16943
ophthalmoscopy in indirect light, USSR study, 12688
photobiology, 10311
point-source sensor circuit is insensitive to background light, 2637
scattering—
gas density measurements, 11490
in highly reflecting pigmented coatings, summary of investigations, 14392
study of biological macromolecules, Rumania, 14284
source detector improved, photocell shadowing technique, 2674
sources for remote sensing systems, 16893
transmission through plane water surface and its return by submerged retroreflector, 13031
see also Polarization (light).
- Light filters:**
electronic filter discriminates between true and false reflections, 9837
exposure value (EV) system expanded to include filter factors and transmittance, 6765
transmission characteristics of auto analyzer colorimeter filters determination, 7352
- Light lists, *see* Lights and lighting.**
- Light modulators, electro-optic and magneto-optic, 11487**
- Lighthouse Service:**
cost-of-living annuity adjustments, report, 12253
former employees—
retired pay, increase, report, 12256
retirement age, lower requirement, report, 12251
widows of former employees, increased annuities, report, 12253
widows of former professional employees, provide annuities, report, 12254
- Lighting, *see* Lights and lighting.**
- Lighting equipment, *see* Lights and lighting.**
- Lightning:**
ball, USSR study, 1332
general information, safety rules, etc., 6229
- Lightning arrestors, consolidated identification list for test evaluation, Federal supply catalog, Department of Defense section, 3318, 7855**
- Lights and lighting:**
Coast Guard lists—
Atlantic and Gulf Coasts, and Antilles, 12123
Atlantic coast, local, 14877
Great Lakes, 9003
Mississippi River system, 9004
Pacific Coast and Pacific Islands, 16089
colors of signal lights, selection, definition, measurement, production, and use, 8522
desk light, Federal standard, 17764
determining scattering and absorption coefficients of paper by diffuse illumination, 11114
economy approach lighting aids for airports, 10245
electric lighting fixtures, current industrial reports, 5858
fixturs, Federal item identification guides for supply cataloging, supplements, 3289
high intensity runway lighting system, 12499
illumination for safety in industry, instructor outline, 8296
illumination levels for various kinds of industrial work, student reference, 9731
light sources for remote sensing systems, 16893
maintenance of lights in Red Sea, agreement, 8729
Naval Oceanographic Office, lists—
Baltic Sea with Kattegat, etc., 1539, 7005, 11645, 18101
British Isles, etc., 5334, 11644
Europe and Africa, west coasts, etc., 1538, 5333, 11643, 18100
Greenland, etc., 5331, 9972, 14578
North and South America, west coasts, etc., 1537, 7004, 11642, 18099
Norway, Iceland, and Arctic Ocean, 5335, 5572
Pacific Ocean, western, etc., 5332, 9973, 14579
outdoor recreation, lighting for, 10331
panels illuminated by edge-lighted lens technique, 5204
temporary lights for flammable and general use, maritime safety data, 17889
- Lignin:**
effect of inorganic salts on pyrolysis determined by dynamic thermogravimetry, 8103
production and detection in wood, 8080
- Lignite:**
pulverizing in ball mill, 15476
technology and use, Mines Bureau-University of North Dakota Symposium, 1965, proceedings, 1398
thickness of bituminous coal and lignite seams mined, 14327
see also Coal.
- Lignite tar, *see* Tar.**
- Lim Al Ran, relief, 16180, 17528**
- Lim, Benjamin H.:**
mineral industry of—
Cambodia, Hong Kong, Laos, North Viet-Nam and South Viet-Nam, 11358-359
Japan, 12803
Venezuela, 12809
- Lim Soo Ran, relief, 16180, 17528**
- Limb rust, damage to pine trees, 4848**
- Lime:**
mineral industry survey, monthly, 3508
minerals yearbook chapter, 2546
structure, effect in oxygen steelmaking, 6682
- Lime-soda sintering:**
alumina—
extractability from anorthosite, correlation of reaction products, 9784

Lime-soda sintering—Continued
 alumina—continued
 produced from clay, evaluation of process, 9779

Limestone:
 crushed, coarse aggregate, 3- and 6-in. maximum size, contained in mass concrete, comparison of properties, 4745, 6216
 imported for use in manufacture of cement, duty-free treatment—
 law, 10483
 reports, 9092, 10563
 Mammoth Cave area, hydrology, 1132
 Tertiary, artesian water, in Southeastern States, 6399
 Twin Creek limestone (Jurassic) in western interior of United States, 8168
 Winchell, Brown County, Tex., Fusulinidae, 12615

Limitations (law):
 District of Columbia, amend statute of limitations in civil actions arising from unsafe property improvements—
 hearing, 17596
 report, 16295

Limnological studies (series), 8171

Lin, Chuan-jui, plane-stress analysis of edge-stiffened rectangular plate, etc., 16895

Linaweaver, F. P., Jr., residential water use, 11206

Lincoln, Abraham:
 brief biography, 14550
 Ford's Theatre, and House Where Lincoln Died, general information, 11613
 100th anniversary of 2d Inauguration, ceremonies and reenactment, Mar. 4, 1965, on east front of Capitol of U.S., 16150
 White House china of Lincoln Administration, 15600

Lincoln Center, student program opens new world to teenagers, 12465

Lincoln County, Colo., Big Sandy Creek Valley, geology and ground-water resources, 11191

Lincoln Creek formation, Grays Harbor basin, southwestern Washington, 12603

Lincoln Memorial, general information, 14550

Lindley, Jonathan, paper, Apr. 28, 1907, 13929

Lindorff, D. P., control of nonlinear multi-variable systems, 6725

Lindsay, Ian R., effects of 55 Mev protons on primates, 4179

Lindstedt method, see Mathematics.

Line adapter provides quick disconnect under moderate side loading, 15535

Linear accelerators, see Accelerators.

Linear discriminant analysis of multivariate assay and other mineral data, 6680

Linear equations, see Equations.

Linear ion accelerators, see Accelerators.

Linear programming:
 circuit analysis for IBM 1620 Monitor IV, etc., 15525
 interindustry relationships, potential demand, 1970, employment projections, 2508
 1970 input-output coefficients, 17891
 see also Electronic computers.

Linear systems, space vehicle flight control systems, 15497

Linearized error analysis of onboard primary navigation systems for Apollo lunar module, 15556

Linehan, Mary B., relief, 17534, 17621

Lines, see Electric lines—Telephone lines.

Lineweaver, Hans, heat stability of egg white proteins under minimal conditions that kill salmonellae, 19118

Lin-fu, Jane S., lead poisoning in children, 16042

Linings, fuel tank, effects of jet fuel anti-icing additive, final report, 9991

Link, Richard F.:
 computer method of fitting surfaces to assay and other data in three dimensions by quadratic-regression analysis, 2580

Linear discriminant analysis of multivariate assay and other mineral data, 6680

Linnehan, John J., nomination hearing, 4857

Linsennayer, Tadd A., establishing business in Taiwan, 10462

Linters, see Cotton.

Linton, Roger, thermal design evaluation of Pegasus, 2687

Linton report, strategy for livable environment, 12622

Lipids:
 phospholipids, metabolism in experimental atherosclerosis of the liver, USSR study, 1275
 skin surface, use of infrared absorption spectroscopy for representation, Yugoslavian study, 12667

Lipman, P. W., compositionally zoned ash-flow sheet in southern Nevada, 1120

Lippold, Richard W., urban housing market analysis, 11205

Lipton, Arthur H., alignment of inertial systems on moving base, 16976

Lipton, W. J., market quality and rate of respiration of head lettuce held in low-oxygen atmospheres, 10180

Liquefied gases, see Gas—Gases—Liquefied petroleum gases.

Liquefied petroleum gases, shipments, 15484

Liquid crystals:
 detect voids in fiberglass laminates, 16941
 practical application, USSR study, 1223

Liquid fuels:
 flammability properties in volatile components at low concentration, 17094
 specific impulse increased by addition of solid oxidizer, 9831
 see also Fuel oil.

Liquid heaters and vaporizers, classification definitions, 18122

Liquid hydrogen, see Hydrogen.

Liquid level gages, circuit automatically calibrates flowmeter against gage reference, 17958

Liquid metals, see Metals.

Liquid micrurgy chamber and microsyringe designs allow more efficient micromanipulations, 16882

Liquid nitrogen, see Nitrogen.

Liquid oxygen, see Oxygen.

Liquid propellants, see Propellants.

Liquidity (economics):
 and monetary management in 1967 (remarks), 16593
 quest for liquidity (remarks), 17270

Liquids:
 contact with solids, classification definitions, 18124
 corrosive, positive displacement cylinder measures volume, 6756
 cryogenic—
 experiment in orbit, settling and interface dynamics, 2608
 reclamation system, 18007
 dynamic behavior in moving containers, with applications to space vehicle technology, 5189
 dynamics of 2-phase liquid-gas weightless medium with aid of surface effects, control, 11562
 incompressible, bending circular plates confining, 97
 liquid-liquid heat transfer, evaluation for large-scale desalination, 14200
 liquid structure, effect on contact angle hysteresis, 9987
 low rate flow switch can be used for gas or liquid, 8477
 mass transfer through liquid interface, mechanism, 8215
 organic, effect of adsorbed water upon spreading on soda-lime glass, 18110

INDEX 1967

- Liquids—Continued**
 outflow from cylindrical tanks during weightlessness, experimental investigation, 2720
 purification or separation, classification definitions, 13046
 sloshing in elastic containers, 16906
 substrate, critical surface tension for spreading, 10006
 surface motion in response to lateral acceleration during weightlessness, 12966
 transient solidification of warm liquid flowing over chilled flat plate, 12935
 weightlessness, frequency and viscous damping, experimental investigation, 15571
- Liquors:**
 alcohol & flying don't mix, 14811
 alcoholic beverages, commercial importation, 971
 District of Columbia alcoholic beverage control act, amend—
 hearings, 949, 12294
 reports, 14993-994, 16258
 impairment of airmanship by alcohol, 4251
 imports into D.C., limit—
 hearings, 12294
 report, 14993
 intoxicating—
 code of Federal regulations, 6295
 require interstate shipments be accompanied by bill of lading, etc., amend U.S. Code, report, 16254
- Lisburne, Cape, coal resources of Cape Lisburne-Colville River region, Alaska, 15306**
- Lisburne Peninsula, Chariot site, areal geology, 8162**
- Liske, E., auto- and cross-correlation of EEG following unilateral caloric stimulation of labyrinth, 71**
- Lisle, Alan G., Jr., USAF Instructors Journal, 4011**
- Lissothuria, see Sea cucumbers.**
- Lists, see subjects of lists.**
- Lita group, see Microlepidoptera.**
- Litchard, Ralph J., land conveyance to, 13579, 13776, 14891**
- Litchfield, Elton L., minimum ignition energy and quenching distance in gaseous mixtures, techniques and apparatus, 15473**
- Litchi, fresh lychees, maintaining market quality during storage and transit, 37**
- LITE Project, see Project LITE (legal information through electronics).**
- Literary gazette, USSR, Mao's cultural revolution, review, 12760**
- Literature, recorded, check†† of archive in Library of Congress, 5089**
see also Children's literature—French literature.
- Lithium:**
 magnesium-lithium alloys—
 coating protects against corrosion, 11477
 developed for low temperature use, 17976
 properties and current applications, 8441
- Lithium fluoride, molten, reaction rate with solid yttrium metal, 15474**
- Lithium hydroxide, electron optical survey of iron oxide films produced in H₂O, LiOH, and LiOH/EFTA solutions, 8594**
- Lithium silicates, see Silicates.**
- Lithium sulfate, heats of formation, 2577**
- Lithography, chemicals, military standard, 9377**
- Litigation, see Actions at law.**
- Little, Elbert L., Jr., natural hybrids among pond, loblolly, and pitch pines, 14137**
- Little, Ralph C., drag reduction by dilute polymer solutions in turbulent flow, 14592**
- Little, S., treatments needed to regenerate yellow-poplar in New Jersey and Maryland, 17804**
- Little blue book, 8971**
- Little Blue River:**
 vicinity of Kansas City, Mo., engineer report—
 departmental edition, 17732
 document edition, 17569
- Little Calumet River, pollution of interstate waters, progress evaluation meeting, 14053**
- Little Joe II (launch vehicle), see Spacecraft.**
- Little River, S.C., to Rio Grande, Tex., and Antilles, light list, 12123**
- Little Rock, Ark., area wage survey, 1361, 17896**
- Little Sandy River:**
 engineer report—
 departmental edition, 2210
 document edition, 2008
- Little Sioux River, control structure, hydraulic model investigation, 7931**
- Littoral:**
 sands in vicinity of Point Arguella, Calif., processes, 7924
 transport, correlation with wave energy along shores of New York and New Jersey, 7925, 10954
- Liu, Y. N., analysis of dynamics of supercritical shafts on many flexible supports by using transmission line analogy, 1773**
- Live stock, see Livestock.**
- Liver:**
 glycogen in anesthetized dog, hydrazine effect, 7359
 metabolism of nucleic acids, phosphoproteins and phospholipids in experimental atherosclerosis, USSR study, 1275
 rats, endrin and carbon tetrachloride comparison of acute effects on, 4252
 Well stain, histochemistry, aerial application, problems, 10320
- Livemore I=2 stellerator, 13329**
- Livestock:**
 animal industry, publications, price list, 2800
 automatic feeding equipment, 8830
 census of agriculture, 5903-4, 7499-7510, 8962-65, 10388-398, 12091-92, 13404-412, 14837-839, 16036-40, 17442
 claims, packers and stockyards act can help you recover losses, 1712, 15869
 dealers, recordkeeping under packers and stockyards act, 44
 estimates, background on revisions, 8752
 export financing, 14076
 exports, expansion, potentials and problems, report, 10794
 farm production, etc., 18234
 feeding by certain packers, prohibit, hearings, 2037
 foot-and-mouth disease, menace to North American livestock, control and eradication progress, 7252
 foreign agriculture circulars, 3345
 foreign crops and markets (periodical), 3344
 grain-livestock economy of European Economic Community, 1951-63, historical review, 2176
 industry—
 Argentina, 11099
 Mexico, 8048
 New Zealand, 11097
 Uruguay, 11098
 USDA's work with cattleman for larger markets, better products and more profit (address), 7259
 insecticides, guide, 10162
 inventory, 5682, 7198
 livestock and meat situation, 3517
 livestock-meat economy, simulated inter-regional models, 12453
 market news, weekly summary and statistics, 3518
 markets, electrically operated gates, 10153
 meat animals, farm production, etc., 10201

Livestock—Continued

packers and stockyards act as it applies to auction markets, 15870
raising on small farm, 1692
regulatory establishments, circuits, and officials, 4071

slaughter—
commercial slaughter, meat and lard production, etc., 11879
monthly report, 3519

statistics—
1965 supplement, 4143
1966 supplement, 13248
tobacco-livestock commercial farms, costs and returns, Bluegrass area and Pennyroyal area, Ky.-Tenn., 16490
western range and livestock, monthly report, 4062

see also Food for livestock.

Living conditions, see Cost and standards of living.

Living expenses, see Cost and standard of living.

Liwshitz, Mordehai, binary diffusion in exponential medium, 2704

Lizardite, solution studies, 8160

Lizards:

Ecuador, check list and key, 6948
Iguanid, Anolis lineatopus, ecology and social organization, 15602

Llorens, Jacinta, relief, 293, 862

Lloyd, Dallas, arms control and disarmament studies in progress, etc., 5531, 13143

Lloyd, Gordon, Canadian wheat marketing, 4816

LMRDA, see Labor-management reporting and disclosure act of 1959.

Lo Che Yim, see Loh, Che Yim.

Load (mechanics):

assumptions for buildings, Army technical manual, 108

asymmetric loads, computer program for finite-difference solutions of shells of revolution, 11497

buckling load of truncated conical shells, influence of prebuckling deformation, 5187

cellular structure as load-bearing structural elements, Hungarian study, 4956

complex fatigue loading, equipment and techniques, 5748

deformation of shallow spherical sandwich shells under local loading, 6895

drag measurements in stream with sinusoidally fluctuating velocity in longitudinal direction, 5749

dynamic characteristics of soils, measurement with penetrometers, 14396

effect of edge loadings on vibration of rectangular plates with various boundary conditions, errata, 12919

external loading, buckling of pressurized toroidal ring, 15570

friction brake cushions acceleration and vibration loads, 6771

helicopter hingeless rotor system structural loads, exploratory flight investigation and analysis, 1487

impulsive loads, aircraft passenger-seat system response, 17388

influence of reinforcing details on yield line pattern and ultimate load-carrying capacity of reinforced concrete slabs, 17736

initial load and exposure to moderately elevated temperature effect on room-temperature fatigue life of Ti-8Al-1Mo-IV titanium-alloy sheet, 14464

laboratory stress-deformation characteristics of soils under static loading, 2596

landing loads on vehicle with tricycle landing gear, theoretical dynamic analysis, 14472

lateral ring metal elastic wheel absorbs shock loading, 6821

Load (mechanics)—Continued

launch vehicle flight loads, effect of canards in reducing, 14496

linear load distributions, cone-cylinder-frustum-cylinder configurations, 9804

linearly varying axial load, upper and lower bounds for eigenvalues of vibrating beams, 2609

load relief, analysis and design of space vehicle flight control systems, 15502

nonuniform radial, applied to boundary of circular hole in infinite plate, 17914

performance changes of axial-flow compressors under high loading, 9916

plane-stress analysis of edge stiffened rectangular plate, subjected to boundary loads, etc., 16895

rocket engine asymmetric loads during tests at sea level, elimination, 6831

rotor air loads, etc., caused by transient inputs of shaft torque as related to stoppable rotor operations, 13308

self-actuating grapple automatically engages and releases loads from over-head cranes, 5150

single-source mechanical loading system produces biaxial stresses in cylinders, 17990

turbine blade loading, advanced concepts to increase, experimental investigation, 12850

uniform and variable loads, equations provide tabular information on effects on thin, flat, circular plates, 8399

web belt load measuring instrument has excellent stability, 14436

Loader, Maurice, and wife, relief, 7625

Loaders (mechanical):

front-end loaders, fatal accidents occurring during operation, analysis, 16856

microscope slide loader for thin-layer chromatography, 13272

tractor loader, how to inspect chart, 9684

Loading, see Load (mechanics)—Unloading and lading.

Loan associations, see Federal savings and loan associations.

Loan companies, see Finance companies.

Loans:

auto loans characteristics at major sales finance companies, 7992

borrowing authority for District of Columbia—

hearings, 13857

reports, 13631, 13824

business loans, revision in quarterly survey of interest rates, 11059

college housing, savings through more frequent payments, GAO report, 17814

commercial and industrial—

by industry, revised series, 6302

outstanding by industry, 3108

constitutionality under certain acts, judicial review, report, 10729

defense production, guarantees, regulations, 1066

economic injury disaster loans for displaced small businesses, 14643

Economic Development Administration—

business loans, who can borrow, how to apply, 6160, 13930

grants and loans for public works and development facilities, 7869, 13935

educational, for dependents of Army personnel, 17383

educational scholarships, loans, and financial aids, 1

Farmers Home Administration—

community centers, recreational enterprises, industrial development, etc., hearings, 15145

increasing farm and ranch income through grazing associations, 1717

insured, increase annual ceiling, hearings, 15145

insured, information for lenders, 4132

INDEX 1967

Loans—Continued

Farmers Home Administration—Con.

- opportunity loans, 8839
- rental & co-op housing in rural areas, 10194
- resource conservation and development, 10193
- rural housing, 10188
- Federal credit unions to directors, etc., amend act—
 - hearing, 10643
 - law, 12179
 - reports, 9283, 10603
- Federal Housing Administration—
 - insured loans for major home improvement, 4904
 - three ways to finance home improvements, 11202
- Federal loans to D.C., authorization, increase, hearings, 10646
- Federal reserve member banks to their executive officers—
 - limitation, amend—
 - hearings, 7800, 10643
 - law, 12179
 - reports, 9283, 10603
 - regulations, amendment, 12534
- financial intermediaries' role in U.S. capital markets, 6303
- Government, efforts to have borrowers finance loans when private or cooperative credit becomes available, Farmers Home Administration, GAO review, 1103
- Greek refugee repatriation, 1929, settlement acceptance, law, 470
- higher education act of 1965—
 - administration of programs, 1966, notes and working papers, 12422
 - student loan program, 6% payment tables and amortization schedules, 7910
- home owners' loan act of 1933, amend, hearings, 15019
- housing—
 - guaranteed by VA in Illinois, potential savings by revising procedures relating to default, GAO report, 11151
 - insurable, digest, 6433
 - senior citizens, through nonprofit corporations, 2383
- land bank, stockholder personal liability on, report, 15130
- national defense student, college work-study program, and list of participating institutions, 1965-66, 1001
- naval vessels to friendly foreign countries, authorize—
 - extension, reports, 2025, 2101
 - report, 10555
- nursing student program, information, 11747
- opportunity loan program in rural America, story in pictures and words, 5674
- participation, with SBA, guide for private lending institutions, handbook, 5490
- property improvement loans, consumer bulletin, 8197
- repaid price-support loans and storage facility and equipment loans, savings if Commodity Credit Corporation recovers interest costs, GAO report, 16678
- Rural Electrification Administration—
 - program, statistical report, 18199
 - RSA borrows, electrification systems, materials acceptable for use, list, 8672
- savings and home financing, source book, 1966 data, 14023
- schools, nonprofit private elementary and secondary, for equipment and materials, national defense education act, 1007
- senior citizens housing loan program, information for applicants, 16712
- Small Business Administration—
 - economic opportunity loan programs, 13114

Loans—Continued

Small Business Administration—Con.

- financial assistance programs, review, 16439
- 502 program for community style self-improvement, 11789
- lending objectives, etc., 2855, 13117
- local development company loans, 8678
- economic growth at community level, 1599
- small towns and rural groups, Oklahoma, financial assistance for water systems and waste disposal systems, questions and answers, 7945
- soil conservation and allotment act, amend with respect to assignment of payments, law, 455
- student loan insurance act of 1965, student loan program, 6% payment tables and amortization schedules, 7910
- student loan program, health professions, 5435, 17149
- students, guaranteed, by States, list, 2177
- title 1, property improvement loans, consumer bulletin, 6425
- truth in lending, revolving credit provisions, hearing, 12402
- veterans—
 - home buying guide, 17286
 - housing, VA guaranty and direct loan program, hearings, 12419
- World War I, loans made upon security of adjusted-service certificates, cancel certain unpaid interest—
 - law, 449
 - report, 918
- veterinary medicine students, law, 423
- vocational student loan insurance act of 1965—
 - amend, hearings, 15026
 - eligible institutions, lists, 2181, 6181
 - water development and soil conservation, questions and answers, 4131
 - watershed loans available from Farmers Home Administration, questions and answers, 4129
- see also Banks and banking—Federal savings and loan associations—Mortgages—Revolving funds—Savings and loan associations.
- Loban, Walter, language ability, grades 7-9, 2186
- Loblolly pine, see Pine.
- Local board memoranda, 3521
- Local development company loans, 8678
- Local government, see Government.
- Local public agency letters, 3523
- Local transit:
 - modal split, documentation, of 9 methods for estimating transit usage, 7100
- National Capital region program, modifying, report, 16294
- operating employees, union wages and hours, 14300
- Location identifiers, airport, etc., handbook, 3524, 11970
- Lock-disconnect mechanism gives positive release to joined bodies, 11460
- Locker plants, see Cold storage.
- Lockette, Emory W., economic data for equal employment opportunity program, Yuma, Ariz., 11771
- Lockhart, L. B., Jr., filter pack technique for classifying radioactive aerosols by particle size, 10017
- Lockhart, R. W., feasibility study of boiling water reactor nuclear steam supply systems, 17391
- Lockheed-California Company, wage chronology, 9742
- Locks (hydraulic engineering):
 - Arkansas River project, low-lift locks, filling and emptying systems, hydraulic model investigation, 4743

Locks (h
McAlp
igat
vest
Wellar
ada
see also
Locks al
guide,
Lockwood
numbe
acterl
9903
Locomot
jet sh
devi
self-lo
Locomot
port,
Locomot
diesel
Arn
Lugar
kee
procu
assi
men
Locust
Locust
etc., 9
Locusts
Logdope
Loess :
China
forest
scr
Loewy,
for f
launc
Log cal
sects
Logan,
Mar.
proje
Logan,
peopl
Logan
prope
Logarith
Logarit
Loger,
anal
Logging
Logic, c
Logic (c
impr
logic
sh
logic
rec
one-o
Int
time
pli
Logica
Logisti
Navar
Logs :
elect
In
14
vene
19
Logtov
2081
Loh, C
Lohma
dym
Ing
Lomax
num
pu
eq

Locks (hydraulic engineering)—Continued
 McAlpine Locks and Dam, Ohio River, navigation conditions, hydraulic model investigation, 6210
 Welland Canal, fees, agreement with Canada, 11872
see also names of locks.
Locks and keys, Federal item identification guide, keys, 17696
Lockwood, Vernard E., effects of Reynolds number and flow incidence on force characteristics of family of flat-front cylinders, 9903
Locomotion:
 jet shoes, extravehicular space locomotion device, 8483
 self-locomotive performance of lunar explorers, 11501
Locomotive Inspection Section, annual report, 11239
Locomotives:
 diesel-electric, operation and maintenance, Army technical manual, 1772
 Lugansk locomotive-building plant, book-keeping organization, USSR study, 1293
 procurement for Thailand under military assistance program, Defense Department, GAO report, 6380
Locust borers, description, control, etc., 9529
Locust trees, locust borer injury, control, etc., 9529
Locusts, see Cicadas.
Lodgepole pine, see Pine.
Loess:
 China's loess soil, collected works, 5000
 forested loess soils after repeated prescribed burns, properties, 8091
Loewy, Robert C., matrix-Holzer analyses for fully-coupled vibrations of clustered launch-vehicle configurations, 5158
Log cabins, protecting from injurious insects in eastern United States, 5627
Logan, Malcolm H., effect of earthquake of Mar. 27, 1964, on Eklutna hydroelectric project, Anchorage, Alaska, 6402
Logan, William B., training retail salespeople, 5495
Logan County, W. Va., coal, carbonizing properties, 5130
Logarithmic amplifiers, see Amplifiers.
Logarithmic antennas, see Antennas.
Loger, J. A., analysis and calibration of analog to digital encoders, 9891
Logging, see Lumbering.
Logic, see Reasoning.
Logic (symbolic and mathematical):
 improved micropower logic circuits, 14461
 logic circuitry used to automatically test shielded cable, 6819
 logic system aids in evaluation of project readiness, 1456
 one-count circuit prevents machine mode interaction, 6697
 time-shared, employed by nixie tube display unit, 5149
Logical decision, Army ROTC, 4210
Logistics, see Military art and science—Naval art and science.
Logs:
 electronic computer program for calculating saw log lumber recovery and value, 14080
 veneer log production shows increase in 1965, Lake States, 14096
Logtown, Miss., land lessees, relief, 251, 2081
Loh, Che Yim, relief, 341, 541
Lohman, Joseph D., police and community, dynamics of their relationship in changing society, 13061
Lomax, Harvard:
 numerical integration methods for computing flow of gas in chemical non-equilibrium, 15568

Lomax, Harvard—Continued
 operational unification of finite difference methods for numerical integration of ordinary differential equations, 11559
Lombardi, John, high reliability screening of semiconductor and integrated circuit devices, 9800
Lomont, T.F., batteries, classification definitions, 18125
Lompoc, Calif., hydrologic inventory, 1957-62, of area, 1117
London, England, U.S. trade center, 12654
Long Beach, Calif.:
 area wage survey, 12773
 naval station, adjust legislative jurisdiction of U.S. over lands within—
 hearing, 18308
 reports, 16268, 17625
Long Island R.R., emergency board report, 13966
Longevity, Drosophila, 9923, 9925
Longitudinal study of acuity and phoria among submariners, 12791
Longleaf pine, see Pine.
Longshoremen:
 longshoremen's and harbor workers' compensation act, as extended, 1019
 regulations governing administration, 4726
 suggested safe practices, 12767
Longwall mining, see Coal mines and mining.
A look at Kentucky's lumber industry, 11136
Looking ahead with SIC, 181
Loomis, R. A., economic survey of northern Lake States region, 7880
Looms:
 automating wool weaving looms, 1186
 broad-woven goods, number in place Dec. 31, 1965, summary, current industrial reports, 5855
Loopers, western hemlock, field testing of Bacillus thuringiensis for control of, 14140
Loper, David E., analysis of confined magnetohydrodynamic vortex flows, 2606
Lopez Garcia, Pedro, relief, 13749
Lopez, Julio J. Castellanos, see Castellanos
Lopez, Julio J.
Lopez, Oscar, relief, 9242
Loran, loan of long range aid to navigation (Loran-A) equipment to Canada, agreement, 2907
Lord, George P., breathing under high ambient pressure, 12792
Lore, George R., relief, 261, 4578
Loriz, Andrew, relief, 9239
Los Alamitos, Calif., undersea warfare laboratory, proposal, subcommittee report and hearings, 13698
Los Angeles, Calif.:
 area wage survey, 12773
 south and east areas, census, population characteristics, errata, 1875
 war on poverty, examination, hearing, 17665
Los Padres National Forest, San Rafael Wilderness area established as part of, message from the President, 5995
Losche, Craig K., soil survey of Tucker County and part of northern Randolph County, W. Va., 11812
Lotan, James E., early performance of pinus contorta X banksiana hybrids, 9533
Lotteries, prohibit certain financial institutions from participating, hearings, 12292, 16397
Lottig, Roy A., experimental heat-transfer investigation of nonwetting, condensing mercury flow in horizontal, sodium-potassium-cooled tubes, 11541
Loud speakers, ultrasonic, for studies of acoustic sensitivity of moths, 4083
Louisiana:
 alluvial soil in sugarcane area, deep-tillage investigations, 1672

INDEX 1967

Louisiana—Continued

- area measurement report, 13357
- census of agriculture, 1964, State and county statistics, 7509
- census of manufactures, 1963, area statistics, 1840
- census of mineral industries, 1963, area statistics, 4288
- climatological data, 3096
- county business patterns, 12049
- electric rate book, 2250
- Euparixia genus, with description of new species, etc., 15606
- forest tax trends, 8099
- landings, fish and shellfish, 3530
- 1965 annual summary, 1075
- mineral industry, minerals yearbook chapter, 5114
- pine plantations, fertilization uneconomic for forage improvement, 14117
- postal map, 15657
- precipitation data, hourly, 3401
- Project Seesaw, beginning for rural disadvantaged, 8284
- rice, rough, costs of drying and storing, 15864
- salt domes, survey, 2541
- Louisville, Ky., area wage survey, 11320
- Louitt, Richard T., bibliography of translations in neural sciences, 17137
- Love, Carl H., abscissas and weights for Gaussian quadrature, 5284
- Love, Esther M., seafaring wage rates, Atlantic, Gulf and Pacific districts, 14313
- Love, James E., experience of X-15 as reusable space vehicle, 2711
- Love, Travis D., report, Technological Laboratory, Bureau of Commercial Fisheries, Pascagoula, Miss., 4801, 16620
- Love County, Okla., soil survey report, 8699
- Lovelady, Hubert G.:
 - microscope slide loader for thin-layer chromatography, 13272
 - preparation of fees for bomb calorimetry, 1742
- Loving, Donald L., sting-support interference on longitudinal aerodynamic characteristics of cargo-type airplane models, etc., 12938
- Low, George M., lecture, Feb. 17, 1966, 5498
- Low, Philip F., thermodynamic relationships for soils at or below freezing point, etc., 8878
- Low, Seth, foster care of children, trends, etc., 10401
- Lowry, Wyman C., contested election, dismissal, etc., report, 12270
- Lower Devonian period, see Devonian period.
- Lower Klamath National Wildlife Refuge, birds, list, 15262
- Lower Monumental Dam spillway and stilling basin, hydraulic model investigation, 10949
- Lower Plateau region, Indians, general information, 6437
- Lowry, David P., effect of spiral grain on pole twist and bending strength, 14126
- Lowman, Paul D., Jr., terrain photography on Gemini IV mission, 11528
- Lowry, J. H., electromagnetic guidance study, 16896
- Lowry, Marilyn E., geology and ground-water resources of Laramie County, Wyo., 8179
- Loxahatchee National Wildlife Refuge:
 - birds, list, 11080
 - general information, 8032
- Loxostege, see Moths.
- Loxotoma, see Microlepidoptera.
- LSD, see Lysergic acid diethylamide.
- Lubbock, Tex., area wage survey, 14295
- Lubricants:
 - bearing torque and fatigue life studies, 11509
 - composites of porous metal and solid lubricants increase bearing life, 6742

Lubricants—Continued

- cooling-lubricating fluids for metal-working, Hungarian research results in development, 14232
- ester, ether, and hydrocarbon base, temperature limitations in 25-mm bore ball bearings, 15576
- Federal item identification guides for supply cataloging, supplements, 3290
- fused-fluoride coatings, additions, for reduction of low-temperature friction, 5265
- rigging typical supply load for high velocity aldrop, 8889
- solid, use for helicopter transmissions, investigation, 8897
- status of research on lubricants, friction and wear, 17082
- see also names of lubricants.
- Lubrication, bibliography, 2621
- Lucas, A. C., design of shielded source for irradiation of natural animal populations, 1782
- Lucas, Donald L., high frequency ionospheric telecommunications systems, 2223
- Lucas, James G., gaseous-film cooling of rocket motor with injection near throat, 6882
- Luce, Charles F.:
 - nomination, hearing, 4644
 - remarks—
 - Mar. 9, 1967, 8208
 - Apr. 14, 1967, 8210
- Ludwig, Howard C., some NASA contributions to use of plasma jet technology in chemical processing, 12867
- Ludwig, John H., address, Oct. 1966, 2836
- Ludwig, Lawrence P., improving performance of face contact seal in liquid sodium by incorporation of spiral-groove geometry, 11505
- Lueders, H. G., experimental investigation of advanced concepts to increase turbine blade loading, 12850
- Lugansk, see Voroshilovgrad, Ukrainian SSR.
- Luggage, see Baggage.
- Lugones, Cesar A., relief, 12338, 16205
- Luidens, Roger W.:
 - Jupiter thigh-thrust round-trip trajectories, 5233
 - round-trip trajectories to moons of Jupiter, 18017
- Luke, Md., motor carrier accident, 16875
- Lull, Howard W., increasing water yield in Northeast by management of forested watersheds, 14136
- Lumb, Dale R., efficient coding system for deep space probes with specific application to pioneer missions, 14493
- Lumber:
 - dimension, southern pine, relation of properties to strength, grading, 2327
 - exports, 8925, 14814
 - Federal item identification guides for supply cataloging, supplements, 3288
 - form lumber, deleterious effects on concrete surfaces, 13988
 - green oak, presurfacing to reduce surface checking, 2301
 - hardwood, production, Appalachian region of Kentucky and Ohio, costs and returns, 4850
 - imports, 147, 14815
 - industry, Kentucky, a look at, 11136
 - northern, Minnesota production declines, 14100
 - production and mill stocks, current industrial reports, 12074
 - softwood, kiln-dried, dimensional changes after surfacing and during storage, 2300
 - straight studs from southern pine veneer cores, 8120
 - studs, 2 x 4, tree characteristics influence on yield from lodgepole pine, 16054
 - see also Logs.

Lumbering:

- clearcut harvesting costs and production rates for young-growth mixed-conifer stands, 4841
- clearcut logging in young-growth timber stands, slash and litter weight, 8087
- designing efficient logging systems for northern hardwoods, using equipment production capabilities and costs, 2330
- loggers, forest products utilization and marketing assistance, 1714
- logging and sawmill operation, Army technical manual, 106
- logging effect on runoff and erosion, 9537
- single-span running skylines, 14102
- skylines tension and deflection handbook, 12584
- soil surface conditions following skyline logging, 14104

Luminescence:

- dosimetry, international conference on, proceedings, 10297
- emission spectra of various thermoluminescent materials, 1552
- meteor luminous efficiency, laboratory measurement, 11411
- thermoluminescent dosimetry—observations (paper), 17392
- systems compared with film badges, 8599
- ultraweak, accompanying biochemical reactions, 14502

Lunar:

- NOTE.—For other subjects beginning Lunar, see Moon.
- Lunar charts and mosaic series, U.S.A.F. 4167-68, 7319-33, 8865, 10224-226, 13263, 15886-887

Lunar landings:

- Langley research facility, operational features, 6875
- motion of vehicle during landing impact, procedure for computing, 18043
- research vehicle—
 - electronic flight control systems, operational experience, 1496
 - manned, on-off rate command attitude control system, flight-test evaluation, 9888
- vehicles, touchdown stability, dynamic model investigation, 18042

Lunar missions, see Moon.

Lunar Orbiter, see Spacecraft.

Lunar orbits, see Orbits.

Lunar roving vehicles, auxiliary power systems, 16891

Lunar satellites, see Satellites.

Lunar science:

- lunar science and exploration, 1967 summer study, 17952
- lunar surface studies, bibliography, 11432
- Lunar topography, see Topography.
- Lunar trajectories, see Trajectories.
- Lunch rooms, see Restaurants, lunch rooms, etc.

Lunches, see School lunches.

Lundquist, Dorothy M., bibliography of tree nut production and marketing research, 13233

Lungs:

- cancer, health information, 1575
- vascular and lymphatic absorption of radioactive albumin from lungs, 13269
- Luoma, Arvo A., static longitudinal aerodynamic characteristics of hammerhead-shaped Little Joe II-lunar model, 18013
- Lupherella, see Pelecyopods.
- Lupus erythematosus, systemic erythematosus, general information, 13097

Liquillo Mountains, weather, 1958-62 records, 14130

Luria, Saul M., color-name as function of stimulus intensity and duration, 14320

Lush, Gerson H., Department of State news letter, 3199

Luskin, Sheldon H., technology and manpower in telephone industry, 5036

Lustig, Lawrence K., sediment transport in Cache Creek drainage basin in coast ranges west of Sacramento, Calif., 11181

Lutheran Church of the Covenant, ship model, duty-free entry, 7648, 14886, 16358

Lutton, Richard J., Project-Pre-Schooner, geologic and engineering properties investigations, 17394

Luxembourg:

- mineral industry, minerals yearbook chapter, 6656
- mutual defense assistance, agreement, 11871

Lyapunov method, see Lapunov method.

Lycenidae, see Butterflies.

Lycches, see Litchi.

Lyerly, Ray L., nuclear power plants, 7443

Lyerly, Samuel B., handbook of psychiatric rating scales, 1573

Lyles, Charles H., fishery statistics of United States, 14069

Lymphadenopathy, cystic, of rats due to Rous sarcoma virus, pathogenesis, USSR study, 6554

Lymphatics, absorption of radioactive albumin from lungs, 13269

Lynch, Theodore N., metabolic effects of prolonged bed rest, their modification by simulated altitude, 14777

Lynch, Thomas J., data compression with error-control coding for space telemetry, 11555

Lyon, Richard H., random noise and vibration in space vehicles, 17705

Lyon, Robert L., chemosterilants to control bark beetles, 14108

Lyons, A. J., jr., Streptomyces griseus (Kralnsky) Waksman and Henrici, taxonomic study of some strains, 54

Lyophilization:

- freeze-dry preservation of biological specimens, 6950
- freeze-drying costs, some questions and answers (speech), 12458

Lysergic acid diethylamide:

- Federal drug research and regulatory programs, LSD, organization and coordination, hearings, 2120
- LSD, the false illusion, 15273, 17791
- LSD use on college campuses, hearings, 2128

Lysenidae, see Amphipods.

Lysimeters, monolith, use in evaluation of agricultural hydrology, 5687

Lysons, Hilton H.:

- compatibility of balloon fabrics with ammonia, 4836
- single-span running skylines, 14102
- skylines tension and deflection handbook, 12584

Lyssy, I., methods for determination of trace organic materials in water, 6451

Lytle Creek, San Sevalne area, ground water studies proposed, progress report, 1125

Lytton, Lee, E., evaluation of vertical-scale, fixed index instrument display panel for X-15 airplane, 9918

M

M series, 17116

MA SP series, 6626-27, 9751, 12787, 17907-908

Maag, William L., forced-convection heat-transfer correlations for gases flowing through wire matrices at surface temperatures to 5500° R., 9913

Maahs, Howard G., chemical impurity data on selected artificial graphites, etc., 18040

Mabey, D. R., geologic interpretation of gravity and aeromagnetic maps of Tintic Valley and adjacent areas, Tooele and Juab Counties, Utah, 8164

MAC, see Military Airlift Command.

INDEX 1967

Macaca irus, *see* Monkeys.
 Macaca mulatta, *see* Monkeys.
 McAdams, Francis H., nomination, hearing, 10823
 MacAllister, John J., organizing food training program, 17722
 MacAloney, Harvey J.:
 hemlock borer, 16647
 impact of insects in northern hardwoods type, 2304
 white-pine weevil, 17794
 McAlpine Locks and Dam, Ohio River, navigation conditions, hydraulic model investigation, 6210
 MacArthur, Douglas:
 Japanese operations in southwest Pacific area, 11992
 reports, 11992
 MacArthur, Jean B.:
 management aids for small manufacturers, 2854
 small marketers aids, 2858
 McArthur, J. Wayne, economic potentials for baling wood shavings and sacking sawdust, 10920
 McArthur (coastal survey ship):
 ocean environmental research and survey vessel, description, etc., 10970
 McBarron, H. Charles, uniforms of United States Navy, 1776-1898, posters, 7008
 McBride, Bonnie J., Fortran IV program for calculation of thermodynamic data, 15566
 McCafferty, James A.:
 Federal officers in U.S. district courts, 8799
 persons under supervision of Federal probation system, 15821
 McCahill, William P.:
 remarks—
 May 22, 1967, 11702
 June 15, 1967, 13068
 Sept. 26, 1967, 18143
 Oct. 10, 1967, 18142
 Oct. 14, 1967, 18140
 McCalmont, J. R.:
 farm silos, 5656
 rope on farm, 4103
 McCarran, E. F., chemical quality of surface water in Allegheny River basin, 8180
 McCarron, Helen C., dollars for medical research, 1947-66, sources and performers, 10062
 McCarthy, Jack:
 labor racketeering activities—
 hearings, 2119
 report, 10731
 McCartney, James T., optical properties of coals and graphite, 16849
 McCarty, John L., dynamic response to impact loadings of acceleration sensors having various mounting characteristics, 11521
 McClure, H. David, Yoruba Intermediate texts, 8751
 McColloch, Lucy P., Botrytis rot of bell peppers, 34
 McCollom, J. C., NASA's mammoth transportation problems, 9932
 McConnell, John P., testimony, hearing, 16394
 McCorkle, J. S., grass, ranchers crop, 5636
 McCoy, Caldwell, Jr., system for measuring, 1st and 2d order probability distributions of signals and noise, 17085
 McCracken, David S.:
 foreign trade regulations of—
 Colombia, 16100
 Ecuador, 16101
 McCulloch, Thane H., mass properties of sedimentary rocks and gravimetric effects of petroleum and natural-gas reservoirs, 12608
 McDanels, David L., stress-rupture and creep properties of tungsten-fiber-reinforced copper composites, 17002

McDonald, Francis R., infrared vibrations of benzene rings in condensed thiophenes, 8377
 MacDonald, Gilmour C., relief, 13625
 McDonald, Keith L., earth's magnetic field, 1835-1965, analysis, 16533
 McDonald, Philip M.:
 brushfield reclamation, reforestation with ponderosa pine, 4844
 California black oak, general bibliography, 14105
 seed fall and regeneration from group selection cut, 4810
 McDonald, Robert T., respiration-rate transducers for aircraft environments, 18044
 Macdonald-Wright, Stanton, *see* Wright, Stanton Macdonald-
 McDonnell, J. D., critical tracking task for man-machine research related to operator's delay time, etc., 5174
 McDougal, Robert B., mineral industry of Oklahoma, 6604
 McElhuan, John A., eccentrically stiffened shallow, shells of double curvature, 6873
 McElroy, Dennis L., nomination, hearing, 10863
 McElroy, Robert C., hired farm working force of 1966, statistical report, 16487
 McFadden, Ernest B.:
 floatation characteristics of aircraft passenger seat cushions, 137
 performance characteristics of oxygen mask designs for general aviation, 17412
 physiological protective efficiency of—
 civil aviation oxygen equipment, 15979
 new prototype disposable passenger oxygen mask, 4248
 protective passenger smoke hood, 14812
 Sierra, hanging, quick-don crew, pressure-breathing oxygen mask, 4249
 McFadden, Max W., soldier fly larvae in America north of Mexico, 6957
 McGavin, Joseph J., relief, 291, 787
 McGee, Charles E.:
 diameter distributions in natural yellow-poplar stands, 9544
 regeneration in southern Appalachian oak stands, 12578
 McGhee, Robert J., jet pluming effects on static stability of ballistic bodies at Mach number of 6.00, 2691
 McGill, Ralph E., South and the southerner, 5045
 McGinnis, Edgar L., mineral industry of Ireland, 12802
 McGrath, John J., relief, 13621, 17497
 McGrath, Thomas C., Jr., nomination, hearing, 6092
 McGrew, Jay L., cryogenic liquid experiments in orbit, 5164
 McGuire, Marie C., address, Oct. 20, 1967, 17843
 Mach numbers:
 effect on sonic booms, 18041
 pseudo, concept in 2-phase flows, 2712
 Machado, Miguel A. Rojas, *see* Rojas-Machado, Miguel A.
 Machado Espinosa, Mario V., relief, 559
 Machine accountants, *see* Accountants.
 Machine guns, national firearms act, code of Federal regulations, 11225
 Machine records codes:
 coding, Atlanta, case study in household sample surveys, 3360
 numerical coding, application of automatic data processing to study of seabirds, 14536
 Machine shops:
 Army aviation maintenance engineering manual, shop practices, 7400
 machine repairs formulas, engineered performance standards, 17067
 Machine tools:
 financing, 15730
 industry, problems, etc., hearings, 2061
 manufacturers and distributors, problems, report, 4514

Machine translations, *see* Translating machines.

Machinery:

assembly machines, industrial plant equipment handbook, 7850
chemical, USSR industrial development, translations, 4016
construction, material and strength properties of components, results of ultrasonic testing in practice, 13339
East European industries, translations, 3956
horizontal machine for testing structural wood elements in tension, 8062
inspection for ships of Navy, military standard, 2154
machine for application of dust to cut seed potatoes, 7241
machine repairs formulas, engineered performance standards, 17067
machine to predict box-office success of motion picture, USSR study, 11288
machines for centralized control, USSR book, 4937
manufacturing, chemical and pharmaceutical products, industrial plant equipment handbook, 7851
one-count memory circuit prevents machine mode interaction, 6697
power, USSR industrial development, translations, 4018
repairman 1 & C, supplement, 11658
repairman 3 & 2, supplement, 11658
rubber and plastics working machinery, industrial plant equipment handbook, 7849
safeguarding, occupational safety aid, 9705
Shanghai Municipal Bureau of Machine and Electrical Industries, product standards, Communist China, 12759
size reduction machinery, industrial plant equipment handbook, 4675
special industry, Federal item identification guides for supply cataloging, supplements, 3202
vibration, reduced by post-stressed concrete foundation, 15489
see also names or types of machinery.

Machines, *see* Machinery.

Machining:

electrical discharge equipment, use of traveling wire electrode to increase productivity, 15490
internal, accomplished at constant radii, 5214
selected, sand metal fabricating technology, compilation, 11429
Machinists, *see* Aviation machinists.
McIntire, Wayne, L., spur gear design technology, 5747
McIntire-Stennis act, *see* Forests and forestry.

McIntyre, G. T., mineral industry of Kansas, 6653

MacIver, Bruce N., formation and initial stability of slopes on cohesionless materials, 17398

Melver, Robert G., treatment of altitude dysbarism with oxygen under high pressure, 7367

Mackay, James A., contested election, report, 12271

McKean County, Pa., Sartwell oilfield, predicted oil recovery by waterflood and gas drive, 11373

McKee, Edwin D., paleotectonic investigations of Permian system in United States, 16691

McKee, W. M., safety review, 3844

McKelvey, V. E., phosphate deposits, 16687
McKenna, Muriel, spinal cord injury, selected bibliography, 5585

MacKenthun, Kenneth M., algal growth, aqueous factors other than nitrogen and phosphorus, selected biological references, 6838

McKenzie, Jess M., physiological responses of pilots to severe weather flying, 5804

Mackenzie, Vernon G., address, Jan. 19, 1967, 8636

McKinney, John R., relief, 772

McKinney, Linwood W., summary of NASA data relative to external-store separation characteristics, 2686

McKisson, R. L., solubility studies of ultra pure transition elements in ultra pure alkali metals, 1424

Macklet, Cleon A., low-temperature specific heat of palladium containing interstitial hydrogen, 1548

McKoy-Helgerson Co., relief, 802

McLamore, V. R., seismic velocity determination and distance measurements in salt dome, 1808

McLaughlin, Milton D., maneuver speed increases of SST configuration in relation to speed margins, 16972

McLemore, B. F., loblolly seed dormancy influenced by cone and seed handling procedures and parent tree, 8092

McLoughlin House National Historic Site, general information, 1534

McLouski, R. M., diffusion of impurities into silicon from gaseous sources, 1421

McMahon, Michael C., non-rotating vorticity meter, 16910

McMinn, James W., comparative fire resistance of 2 seed sources of south Florida slash pine, 9540

McMillan, Ray F., relief, 16186

McMullin, Leslie D.,
fishery associations in United States, list, 14057

fishery cooperatives in United States, list, 14058

McNab, W. Henry, prescribed burning improves Piedmont loblolly pine seedbeds, 12582

McNamara, Patrick V., memorial services, 5568

McNamara, Patrick V., Federal Office Building, *see* Patrick V. McNamara Federal Office Building.

McNamara, Robert S.:
statement, defense program, 1968-72 and 1968 budget, 4527
testimony, hearing, 16394

McNamara-O'Hara service contract act, *see* Government contracts.

McNary Dam, fish passage report, 13974

McNary National Wildlife Refuge, birds, list, 11081

McNaughton, John T., nomination, hearing, 15148

MacNeal, Richard H.:
flutter of flexible, towed tension shells, 9818

flutter of towed rigid decelerators, 9814
meteoroid damage to filamentary structures, 16899

McNee, Richard C., analysis of repeated measurements on experimental units in 2-way classification, 7348

MacNeill, F. Stearns, cenozoic pectinids of Alaska, Iceland and other northern regions, 11180

McNeill, Robert L., address, Nov. 8, 1966, 226
McNeill, Walter E., simulator and flight study of yaw coupling in turning maneuvers of large transport aircraft, 11494

McNitt, Harold A.:
basic data on economy of Finland, 1946
foreign trade regulations of Finland, 17481
selling in Sweden, 4445

Macpherson, Thomas C., jr., relief, 313, 789

McQuade, Lawrence C.:
addresses, etc.—

June 23, 1966, 224

Oct. 17, 1966, 237

Nov. 9, 1966, 228

Dec. 1, 1966, 1965

Dec. 28, 1966, 4425

INDEX 1967

McQuade, Lawrence—Continued
 addresses, etc.—continued
 Jan. 21, 1967, 4427
 Mar. 16, 1967, 7571
 Apr. 1, 1967, 9025
 Apr. 20, 1967, 9012
 May 16, 1967, 10452
 July 13, 1967, 12127
 July 31, 1967, 13468
 Oct. 20, 1967, 17473
 Nov. 1, 1967, 17483
 nomination, hearing, 13855
 McQuilkin, William E., tree planting in scrub
 oak areas, 8112
 McRae, Ernest D., jr., West German research
 vessel, Walther Herwig, 17772
 Macro-economic production functions as ap-
 plied to economy of USSR, 2469
 Macroeconomic productive function as mod-
 el of economic growth, USSR study, 9630
 Macromolecules, *see* Molecules.
 Macrophreata, monograph of existing crin-
 oids, 14528
 Macy, John W., jr.:
 address, July 25, 1966, 1932
 Federal employment of the mentally re-
 tardated, 1560
 Madagascar:
 cyclopoid copepods associated with—
 alyconarian coral Tubipora musica
 (Linnaeus), 6959
 corals Psammocora contigua (Esper),
 6965
 labor conditions, 2511
 mineral industry of Malagasy Republic,
 minerals yearbook chapter, 6657
 Madagascar and Africa, Agency for Safety
 of Air Navigation in, *see* Safety of Air
 Navigation in Africa and Madagascar
 Agency.
 Madariaga, Adela A. Rubio, *see* Rubio Mada-
 riaga, Adela A.
 Maddagiri, Heather G., relief, 349
 Maddagiri, Helena G., relief, 349
 Madden, Howard L., comparison of airman
 qualifying examination, with differential
 aptitude tests, errata, 4171
 Madden, J. Patrick, economies of size in
 farming, 6172
 Madden, Richard, ballistic limit of double-
 walled meteoroid bumper systems, 9893
 Madera, Calif., data for wells in area, San
 Joaquin Valley, 12605
 Madison County, Ind., soil survey report,
 8700
 Madow, William G., interview data on
 chronic conditions compared with infor-
 mation derived from medical records,
 11762
 Maeglin, R. R., predicting specific gravity of
 plantation-grown red pine, 8061
 Maestlin, AIC 57 D, lunar chart, 7324
 Magazines, *see* Periodicals.
 Magee, Chris, new era, 3620
 Magellanic Clouds:
 large, historical survey, identification, etc.,
 8681
 small, variable stars, 2859
 Magic, primitive, in Judaism and Islam,
 USSR views, 2452
 Magistrates, *see* Judges—United States
 magistrates.
 Magnesium:
 alloys—
 determination of silver and indium in,
 9985
 protective coatings, coordination chem-
 istry of magnesium ion, 10013
 carbothermic production methods, eco-
 nomic and technical evaluation, 11376
 cerium alloys, intermediate phases between
 magnesium and Mg₂Ce, 1414
 concentration related to parotid fluid flow
 rate, 10239

Magnesium—Continued
 current concepts of its role in human body
 and disturbances of its metabolism,
 USSR study, 2446
 identification marking, Federal standard,
 8008
 lithium alloys, properties and current ap-
 plications, 8441
 magnesium-lithium alloys—
 coating protects against corrosion, 11477
 developed for low temperature use,
 17976
 mill products, current industrial reports,
 3169
 natural phases of system MgO-SiO₂-H₂O
 and systems containing congeners of
 magnesium (series), 8160
 primary, quarterly report, 3769
 products, preparation for shipment and
 storage, military standards, 16466
 use of steel and tantalum apparatus for
 molten Cd-Mg-Zn alloys, 8397
 Magnesium oxide, natural phases of system
 MgO-SiO₂-H₂O and systems containing
 congeners of magnesium (series), 8160
 Magnetic domain, *see* Domain structure.
 Magnetic fields:
 axisymmetric diverging, 3-dimensional
 plasma acceleration, etc., 5256
 biomagnetics, considerations relevant to
 manned space flight, 16911
 earth—
 components calculated, NELIAC-N com-
 puter program, 17083
 1835-1965, analysis, 16533
 influence on—
 backscattered signal, computations,
 USSR study, 6575
 diurnal variation of *f*_o F2 (Fourier
 analysis), 8512
 effect on central nervous system, 14504
 electron gas in magnetic field, 11569
 interplanetary, and solar winds, USSR
 study, 16749
 magnetically induced nonequilibrium elec-
 tron temperatures, 9995
 measurements in neighborhood of moon
 by artificial satellite Luna-10, 1285
 oblique ambient, time-dependent structure
 of one-dimensional magnetic compres-
 sion waves in collisionless plasmas,
 11508
 solenoid, calculated from superposed semi-
 infinite solenoids, 1469
 superconducting torus, potential and mag-
 netic moment, 9986
 ultrasonic attenuation for free electrons
 in presence of, theoretical investigation,
 2705
 use to produce ionic concentration gradi-
 ents, 9559
 Magnetic materials:
 cobalt-iron alloys with superior high tem-
 perature properties, 5209
 transportation, Federal aviation regula-
 tions, 10998-999
 Magnetic moments, superconducting torus
 in nonaxial uniform magnetic field, 9986
 Magnetic Observatory, Automatic Standard,
see Automatic Standard Magnetic Ob-
 servatory.
 Magnetic recording, high-frequency, USSR
 study, 6504
 Magnetic resonance, electron, and magnetic
 susceptibility of Cu (II) compounds
 with dicarboxylic acids, USSR study,
 14252
see also Nuclear magnetic resonance.
 Magnetic separators, use for reexamination
 of nonmagnetic taconite occurrences,
 14346
 Magnetic storms:
 equatorial Dst (storm time variation),
 provisional hourly values, 14459
 principles of predicting, USSR manual,
 14237

Magnet
 Park
 Magn
 comp
 co
 ob
 plas
 sta
 tic
 Magn
 neut
 ne
 12
 para
 eff
 resid
 sh
 suscep
 in
see be
 Magn
 Magn
 Magn
 cobal
 te
 Inter
 cu
 Magn
 Magn
 Magn
 inst
 pl
 mag
 tr
 Magn
 ship
 stat
 p
 tur
 v
 vort
 a
 Magn
 con
 n
 o
 max
 non
 d
 Magn
 114
 Magn
 Lati
 I
 non
 1
 Magn
 681
 Magn
 of
 US
 Magn
 of
 Magn
 Magn
 cla
 sup
 Magn
 ro
 Mah
 Mah
 nu
 sec
 tre
 Mail
 say
 eff
 Mail

Magnetic surveys, Canyonlands National Park, 2368

Magnetic waves:

compression, time-dependent structure in collisionless plasmas embedded in oblique ambient magnetic field, 11508
plasma accelerator, variable-length constant-velocity, experimental investigation, 18034

Magnetism:

neutron diffractometer allows both magnetic and crystallographic analyses, 12835

paramagnetism, finite lattice heat capacity effects on spin-lattice relaxation, 14516
residual, holds solenoid armature in desired position, 8464

susceptibility of nickel- and cobalt-bearing minerals, 17911

see also Electromagnetism—also headings beginning Magnetic.

Magnetite, alluvial, minor elements from Inner Piedmont belt, N.C. and S.C., 8172

Magnetization:

cobalt-iron alloy, magnetically soft, high-temperature, investigation, 1500
internal, of seamounts, and its computer calculation, 12612

Magnetograms, MHV series, 7552

Magnetohydraulics, see Hydraulics.

Magnetohydrodynamic generators:

installed in Soviet experimental power plant, 15428
magnetically induced nonequilibrium, electron temperatures, 9995

Magnetohydrodynamics:

ship propulsion, USSR study, 14256
stationary equilibria, variational principle, 12908

turbulent magnetohydrodynamic flows in prismatic and cylindrical pipes, 11571
vortex flows, confined near flat plate, analysis, 2606

Magnetometers:

condition of maximum sensitivity of magnetometer based on optical orientation of atoms, USSR study, 16772

maximum response based on optical orientation of atoms, USSR study, 17870
nonmagnetic, explosive actuated indexing device, 11496

Magneto-optics, modulators, properties, 11487

Magnetoplasma:

Langmuir probe analysis of electron temperature variations in exhaust of magnetoplasma dynamic arc, 18047

nonlinearities in collisionless waves, magnitude, 5253

Magnetoresistor monitors relay performance, 6810

Magnetosphere, lunar intersection with tail of earth's magnetosphere, indications, USSR study, 1284

Magnetostatics, echo mode variation in study of yttrium iron garnet rods, 12885

Magnetrons, ion gauge, hot-cathode, 5185

Magnets:

classification bulletin, 2785
superconducting, effect of mechanical vibrations on performance, 11511

Magpies, magpie reduction in an urban roost, 16635

Mahé Island, *see* Seychelles.

Mahogany:

nursery stock, root pruning, 12572
seedlings, height growth, St. Croix, V.I., 12575

trees, West Indies, killing unwanted by peeling and frilling, 12573

Mail carriers, rural, compensation, potential savings through changes in legislation effecting, GAO report, 4874

Mail contracts, *see* Postal services.

Mail matter:

addressing for optical character reader, 17111

automated address coding guide and data retrieval series, 16023

carrying and handling, cost ascertainment report, 8613

Census Bureau address coding guide and register, general applications, 16023

false or misleading, amend U.S. Code—hearings, 747, 9167, 16430

reports, 10580, 16279

fraud—
and mallability, enforcement action, monthly releases, 3360

how postal inspection service protects you, 17119

military assistance program addresses, MILSTRIP, 4679, 6152, 9379, 10900, 12445, 13926, 16472

pandering advertisement—
not desired by addressees, prescribe mailing, amend U.S. Code, hearings, 10671, 17608

regulate, hearings, 17672

return of obscene mail, amend U.S. Code, hearings, 10671, 17608

shipping charges, rates to be fixed by Postmaster General, hearings, 9166

transportation of mail by vessels, rates of compensation—
law, 17554

reports, 10581, 16376

unsolicited sample drug products, etc., prohibit mailing, hearing, 10668

see also Franking privilege—International postal service—Letters.

Mail routes, *see* Postal service.

Mailing lists, suppliers and buyers, to furnish information to Postmaster General with respect to their identity and transactions involving sale or exchange, hearing, 10667

Mails, *see* International postal service—Postal service.

Maine:

area measurement reports, 13358

census of agriculture, 1964, State and county statistics, 7499

census of manufactures, 1963, area statistics, 1841

census of mineral industries, 1963, area statistics, 7463

county business patterns, 10348

electric rate book, 11021

forest fires, who starts them and how? 8076

landings, fish and shellfish, 3533

annual summary, 12541

postal map, 5391

Maine, University of, *see* University of Maine.

Mainland, Donald, notes on biometry in medical research, 17284

Mainland China in world economy, 10493

Maintenance:

aerospace maintenance safety, 2992

aircraft

Army Dept. management of repair parts reserved at depots in U.S., GAO review, 9555

Army, quality control and technical inspection, guide, 8893

aircraft tools, Army technical manual, 4218

air-ground communication facilities, FAA handbook, 10980

air navigation and traffic control facility outage and equipment failure report, FAA handbook, 10983

Army aviation engineering manual, 4218, 7400, 8892, 10282

Army model CH-34 helicopters, technical manual, 7401

aviation administrationman 1 & C, Navy training course, 7011

INDEX 1967

Maintenance—Continued
 beacons, non-directional, FAA handbook, 6236
 bulletins, FAA handbook, 10982
 certification procedures, FAA handbook, 10981
 closed circuit TV course, class C, curriculum, 7015
 diesel-electric locomotives, Army technical manual, 1772
 Douglas DC-6/7 series aircraft, inspection notes, 17747
 electric power generating plants, Air Force manual, 8855
 electronics, Coast Guard manual, amendments, 4416, 10441
 employment classifications and wage rates, region 6 housing authorities, HUD, GAO review, 2349
 equipment, facilities in shore establishment, Navy design manual, 14566
 general practices and procedures of Maintenance Division, Flight Standards Service, FAA handbook, 16560
 industrial plant equipment, quality assurance program, 13912
 internal combustion engines, 13017
 irrigation operation and maintenance bulletin, 8448
 Job Corps men's and women's centers, facilities maintenance and utilities operations handbook, 7876
 maintenance and service workers in Washington, D.C., metropolitan area, examination announcements, 4403, 10428
 amendments, 5925, 7532
 management data, field command procedures, 11995
 management, depot, field, and organizational, Air Force manual, change, 14767
 management in Defense Dept., 17858
 preventive—
 occupational safety aid, 9720
 safety in industry, instructor outline, 8293
 railway cars, Army technical manual, 8891
 shop practices, Army technical manual, 7400
 training on TT-299/UG teletype equipment, trainee's guide, 1547
Maintenance shops:
 equipment, Federal item identification guides for supply cataloging, supplements, 3287
 specialized equipment, industrial plant equipment handbook, 7852
Maintenance technicians, examination announcement, 7537
Malo, Domenic A., effect of chemically inert gases on oxygen consumption in living tissues, 5708
Maisel, Sherman J.:
 remarks—
 Nov. 10, 1966, 1060
 Nov. 16, 1966, 1064
 Feb. 1, 1967, 4781
 Apr. 14, 1967, 7996
 May 9, 1967, 9496
Makatea Island, see French Polynesia.
Make waistline fit on pants, 7282
Making and preserving apple cider, 13222
Making Europe whole, unfinished task, 1626
Making household fabrics flame resistant, 10177
Making pants longer or shorter, 7289
Malacca Strait, sailing directions, 14576
Malagasy Republic, see Madagascar.
Malaria, description, etc., health information series, 17146
Malathion:
 evaluation, as protectant against insects in sorghum grain, in small bins, 11933
 shelled corn protectant against insects in small bins, 36

Malathion—Continued
 use of malathion-treated drying trays to protect raisins from insects during drying and storage, 15859
Malawi:
 labor conditions, 1379
 mineral industry, minerals yearbook chapter, 12508
 treaties, continued application, agreement, 18233
Malaya, see Malaysia.
Malaysia:
 background notes, 10093
 capsule facts for Armed Forces, 10250
 economy, basic data, 1945
 foreign trade regulations, 13459
 Malaya, flies captured in treetops, 5313
 minerals industry, minerals yearbook chapter, 6658
Malcolm, F. B.:
 coarse, feed-sawing of red oak, limited study, 11111
 knee position recorder for sawmill carriage headblocks, 2297
Malcolm, Gerald N., stability characteristics at Mach numbers of 10 and 26 of proposed slender atmospheric probe, 9594
Maldiv Islands:
 Euphloemea astrostrata, new myodocopid oostrocod, 6954
 sailing direction, 17073
Malechek, John C., cattle diets on native and seeded ranges in ponderosa pine zone of Colorado, 6369
Maleic anhydride, see Anhydrides.
Males, see Men.
Maletskos, Constantine, J., intercomparison of reliability of body 137cc. measurements on human beings, 17400
Mall:
 C-47 aircraft, agreement, 11873
 labor conditions, 1380
 Mallards, lead poisoning, test of types in alleviating, 17786
Mallison, Earl D., use of ozone in tomato ripening rooms, 5
Mallophaga, see Lice.
Malmberg, Glenn T., hydrology of valley-fill and carbonate-rock reservoirs, Fahrump Valley, Nev.-Calif., 14178
Malnutrition:
 and hunger in America, hearings, 16428
 young cattle, effect on feed utilization, meat quality, etc., 14765
Malone, John L., private enterprise and United Nations development program, how to bid on special fund projects, 4262
Malone, Kevin, mineral industry of Alaska, 5108
Maloney, Raymond P., investigations of White Mountain mercury deposit, Kuskokwim River basin, Alaska, 6677
Maloy, Charles R., rearing marketable channel catfish in ponds, 6356
Malta:
 background notes, 13136
 capsule facts for Armed Forces, 15907
 cotton textiles trade, agreement, 15785
 deployment of USS Cascade to, agreement, 8745
 deployment of USS Shenandoah to, agreement, 2904
 investment guarantees, agreement, 8748
 maritime matters, deployment of USS Yellowstone, agreement, 15800
Malvin, Harry H., methionine-pyridoxine and alsickness, 77
Mammals:
 amicrobic, raising, USSR study, 6483
 Aransas National Wildlife Refuge, list, 11087
 Bear River Migratory Bird Refuge, list, 6354
 Cabeza Prieta Game Range, list, 11089
 Chincoteague National Wildlife Refuge, list, 2277

JANUARY-DECEMBER

Mammals—Continued

fossil marine from Miocene Calvert Formation of Maryland and Virginia, 1530
Kofa Game Range, list, 11088
Sacramento Valley national wildlife refuges, list, 8030

Mammoth Cave, cavernous limestones of area, hydrology, 1132

Mammoth quadrangle, Ariz., geology, 11163

Man:

and wildlife, animal damage control policy for Sport Fisheries and Wildlife Bureau, 11078

atrial systole effect on right ventricular stroke output, 11956

behavioral model, 1967, his chains revealed, 14401

contaminants produced in space cabin simulator, 11955

control of movements, USSR study, 12690

convulsive state, USSR electron microscopie study of cerebral cortex, 12752

electronicarcsia and electrosleep, USSR book excerpts, 15396

emotional state under conditions of space flight, analysis of intonational characteristics as criterion, 6507

human ecology in south costal Guatemala, 9954

integrated mobility measurement and notation system, 11451

late somatic effects of radiation, 10308

man in loop, space vehicle flight control systems, analysis and design, 12875

man-machine research, critical tracking task related to operator's delay time, 5174

man's adaptation to high altitude of lower Caucasus, USSR study, 14276

oxygen-helium atmosphere—

behavior factors, 86

clinical observations, 90

enteric microbial flora, 79

exercise and cardiovascular response, 88

heat exchange, 81

introduction and general experimental design, 91

major and minor atmospheric components, 89

nutritional evaluation, etc., of feeding bite-size foods, 82-83

oral, cutaneous and aerosol bacteriologic evaluation, 84

renal response, 87

selected blood enzyme response, 85

parotid flow rate, effect of mental exercise, 11963

physical endurance and its development, USSR study, 12698

physical exertion, effect on human organism, USSR study, 12689

physiological functions in normal persons, effects of change in nutrition pattern, complex investigations, USSR study, 1281

space psychophysiology, effect of high and low afferentation on human organism, 1345

viroid etiology of human leukemias, recent research, Rumanian studies, 6549

weather and the hand of man, 13993

Man-hours, see Labor.

Man-machine system:

command information processing systems, human factors research, 119

man-machine problem, report on Soviet symposium, 16753

see also Human engineering.

Management, see Administrative management—Industrial management—Planning.

Management analysts, development program, career opportunity, 9586

Management Department:

District of Columbia, establish—

hearings, 15022

report, 14949

Management information reporting by community action agencies, 13939

Management interns:

NASA headquarters program, 6729

Public Health Service program, 10065

Veterans Administration, 8781

Management Services Office, Agriculture Dept., appropriations, 1968, hearings, 10629, 12397

Managers:

fallout shelter, management handbook, 5916

senior level positions, examination announcement, 8988

Manasquan, N.J., to Cape Hatteras, N.C. and Chesapeake Bay, coastal warning facilities chart, 14720

Manchester, Alden C., dairy marketing, 4697

Manchester, N. H., area wage surveys, 1362, 17895

Mandan, N. Dak.:

culture history, interpretation—

departmental edition, 11973

document edition, 12193

Mandible, see Jaws.

Mandrels:

ductile mandrel and parting compound facilitate tube drawing, 5156

floating, technique used by thin-wall tungsten tubing, 1/4- and 3/8-inch diameter, 5250

hydraulic fluid serves as mandrel for small diameter refractory tube drawing, 5151

porous, provide uniform deformation in hydrostatic powder metallurgy, 12916

Manele Bay:

small-boat harbor construction, additional funds—

hearing, 12427

report, 10732

Manes, Denis H. S. relief, 352, 825

Maneuvering boards, programmed instruction course, 9978

Maneuvers, see Flight.

Manganese:

mineral industry survey, monthly, 3534

ores, duties, continue suspension—

law, 13530

reports, 9100, 13798

reactions with silica, 6684

recovery from ores and slags as chloride, one-step operation, 11369

Manganese dioxide:

battery grade synthetic, disposal from national stockpile—

law, 439

reports, 684, 921

Manikins (space):

thermal, 1435

Manila American Cemetery and Memorial, general information, 17366

Manipulators:

polynomial, AP-168 program, 9858

welding torch and wire feed manipulator, 17993

Manitoba Province, Canada, access highway through Manitoba to northwest angle of Minnesota, construct, agreement, report, 2096

Manly, Mary L., market factors in India, 17477

Manned orbiting laboratory, see Satellites.

Manned spacecraft, see Spacecraft.

Mannella, Gene G., aerospace measurement techniques, symposium, 6734

Manners and customs:

armies and social progress, USSR study, 1327

classification, Library of Congress, 5086

Negro in the West, social and economic conditions, 15453

social usage abroad, guide for American officials and their families, 8712

Manninen, Elisabeth, relief, 281, 841

INDEX 1967

Manning, Larry A., minimal energy ballistic trajectories for manned and unmanned missions to Mercury, 9886

Manning, Raymond B.:
 demand section of genus *Gonodactylus* Berthold, etc., 14541
 notes on genus *Manningia*, etc., 6968
 review of genus *Odontodactylus*, etc., 14535

Manning of vessels, *see* Ships.

Manningia, *see* Crustaceans.

Manometers, micrometer U-tube for ranges up to 100 mm of mercury, drawings, 17040

Manpower:
 American Science, 1964, report of National Register of Scientific and Technical Personnel, 5323
 America's industrial and occupational requirements, 1964-75, study, 6603

Army—
 nomograms for policy evaluation, 4227
 rotation policy models, 7404
 automation research monographs, 16793
 development and training act of 1962—
 amendments of 1966, law, 496
 as amended, resources, utilization, etc., 1350
 earnings mobility of MDTA trainees, 11296
 employer's guide to on-the-job training, 13278
 good training, good jobs, Detroit Skills Center, 16500
 handbook chapter, training project development, 15221
 learn and train for job under MDTA, 13971
 MDTA and your health manpower needs, 15434
 MDTA trainees, attitudes and motives, pilot investigation, 5035
 redevelopment area residents program, overview, 10939
 review of training activities, 15433
 summary, 6594
 training activities, report of Secretary of Health, Education, and Welfare Dept., 9378
 training programs, impact on public assistance caseloads, 3406
 development, community action for employment, 2166
 DoD nationwide priority referral system, improved management, 2152
 educating for 21st century needs tomorrow is now, 17717
 health resources statistics, 10051
 health service industry, 1965-75, report, 11297
 implications of selective service, hearings, 10862
 improved management in Federal Government, report, 12209
 print as House document, report, 12280
 industry, surveys, 17729
 intergovernmental manpower act of 1967, hearings, 12409
 library, public and school librarians, occupational characteristics, 4713
 managing or motivating manpower? (address), 11295
 manpower and employment statistics, 15452
 manpower and training needs of States and local governments in water pollution control, report, print as Senate document, report, 16362
 manpower/automation research notice, 3535
 manpower research institutional grant program, progress report, 16795
 manpower, today's frontier (address), 10945
 mental health manpower—
 current statistical and activities report, 2829
 utilization, 2829

Manpower—Continued
 national emergency standby regulations and instructions, Federal personnel, 3306
 national patterns of R&D resources funds in United States, 14562
 Navy, civilian manpower management (periodical), 8602
 our market is the world, our product the individual (address), 12473
 policy and current programs (address), 16515
 policy and program, seminar—
 automation in perspective of long-term technological change, 2487
 challenges in sustaining prosperity, 5041
 changing cultural patterns of work and leisure, 5042
 cybernation and social change, 6596
 how well is employment act of 1946 achieving its goal? 5043
 investment in poor people, 5044
 labor's role in war on poverty, 11299
 labor's view of manpower policy, 14279
 manpower potential in our ethnic groups, 17885
 perspectives on natural resources and human resources, 6597
 South and the southerner, 5045
 university perspectives on manpower, 15435
 womanpower policies, 17886
 working with automation, 11300
 potential in our ethnic groups, seminar proceedings, 17885

projections—
 appraisal and plan of action, report of working group on manpower projections to President's Committee on Manpower, 16794
 selected references, 2485
 prospective manpower situation for science and engineering staff in universities and colleges, 14563
 publications, selected, 8285
 railway post offices costs savings available, GAO report, 6377
 report of the President, 1967, statistics—
 departmental edition, 9680
 document edition, 9078
 reports, 5035, 11296
 reprints, 8284
 requirements, resources, utilization, and training, Labor Department report—
 departmental edition, 9680
 document edition, 9078
 research bulletins, 5036, 6593, 11297
 research, guidelines, etc., for grants and contracts, 6591
 research projects, 1351, 17884
 scientific and technical, impact of Federal research and development policies report and recommendations, 4650
 scientific manpower utilization, hearings, 4632, 10869
 specialized personnel, career guidance, report of Subcommittee on Career Guidance of Committee on Specialized Personnel, Labor Dept., 11293
 statistics from current population survey, concepts and methods used, 12768
 telephone industry, 1965-75, report, 6036

utilization—
 affirmative program, equal opportunity in Reclamation Bureau, 13104
 at military installations in Far East and Western Europe, report, 9133
 water pollution control, manpower needs, 17615

Manpower Administration, manpower, publications, selected, 8285

Manpower for America, 13971

Manson, S. S.:
 application of double linear damage rule to cumulative fatigue, 9875

Manson, S.S.—Continued
 low cycle fatigue of notched specimens by consideration of crack initiation and propagation, 12921
Manson, S. V., exploratory study of internally and externally finned radiators for Brayton cycles in space, 8405
Mantas, Panagiotis, *see* Paulus, Panagiotis.
Manual arts therapists, Veterans Administration hospitals and clinics, nationwide, 14713
Manual de referencia sobre la ley de normas razonables de trabajo, según emmendada en 1966, 5590
Manuals, *see* names of departments, etc., issuing manuals—also subjects.
Manufacturers, *see* Manufactures and manufacturers.
Manufacturer's agents, sample display service, new way to find agents and distributors overseas, 4923, 14207
Manufactures and manufacturers:
 annual survey of manufactures, 1830, 4264, 7454-55, 8927, 17418-420
 book value of fixed assets and rental payments for buildings and equipment, 17418
 expenditures for new plant and new equipment, 7455
 fuels and electric energy used, by major groups, and by divisions and States, 17419
 industry groups and industries, general, statistics, 4264, 8927
 States, standard, metropolitan statistical areas and large industrial counties, statistics, East South Central division, 17420
 value of manufacturers' inventories, 7454
Army Materiel Command manufacturing methods and technology, 5-year program, 15943
census, 1963—
 area statistics, 152-165, 1833-53, 4271
 bound volume, 7462
 final reports, announcement and order form, 12033
 general summary, 4273
 industry statistics, 4272, 8933
 bound volume, 7461
 manufacturers inventories, 4275
 plant and equipment expenditures, 4276
 preliminary reports, 3086
 publication program, 5819
 size of establishments, 4274
 special reports, 13362, 13817
 subject statistics, 4273-79
 bound volume, 7460
 summary and subject, industry and area statistics, announcement and order form, 12037
 census publications, price list, 7056
 commodity transportation survey—commodity groups, 7472
 shipper groups, 1855
 and production areas, 7473
 computerized parts list system coordinates engineering releases, parts control, and manufacturing planning, 17929
 concentration ratios in industry, 2126
 supplement, 13362
 earnings series, summaries, 5083, 12775
 employment in manufacturing, by counties of U.S., 1960, map, 1890
 enterprise statistics, 1963, preliminary reports, 3241
 exports of manufactured products, survey of origin, current industrial reports, 17436
 exports sales and orders, current industrial reports, 3169
Federal supply code for manufacturers—excluding United States and Canada, 2145
 supplements, 3325

Manufactures and manufacturers—Con.
Federal supply code for manufacturers—Continued
 United States and Canada—
 code to name, 2144, 16457
 supplements, 3326
 name to code, 976, 17688
 supplements, 3327
 financial report of corporations, quarterly, 3794
 injury rates in manufacturing industries, 3422
 machine tool manufacturers, problems, report, 4514
 manufacturers part and drawing numbering systems, Defense Dept. handbook, 2146, 7847, 10886
 manufacturers' shipments, inventories, and orders, current industrial reports, 3540
 manufacturing capacity, etc., revised indexes, 4790, 14045
 Minnesota and two Dakotas rank high in production and international sales (remarks), 4448
 small manufacturers, management aids, annual compilation, 2854
 type of organization, 1963 census of manufactures, 5820
 wage developments, summary, 4041
 water use in manufacturing, 1963 census of manufacturers, 4279
see also names of manufactured articles.
Manuscripts:
 historic, concerning general agriculture in collection of National Agricultural Library, 8515
 national union catalog, Library of Congress collections, 2531
 Manville, Richard H., extinct sea mink, with taxonomic notes, 6964
 Many-body problem, *see* N-body problems.
 Mao-Tse-Tung, anti-economism campaign idealizes poverty, USSR historian claims, 6582
MAP (Macro assembly program), *see* Electronic computers.
MAP (military assistance program), *see* Military aid.
Map Information Assembly and Display System, MIADS2, alphanumeric system for large computer, 14142
Map reading, *see* Maps and charts.
 Mapel, W. J., bituminous coal resources of Texas, 8158
 Maple, William R., Appalachian hoblolly grows well in Arkansas Ozarks, 2320
Maple:
 diseases and their control, guide for homeowners, 8832
 queensland maple seedlings in Hawaii, growth accelerated after first year, 8090
 red, suppressed, annual growth, basis for hydrologic inference, 11171
 sugar maple log and lumber values, effect of staining caused by sapstreak disease, 2306
Maple syrup:
 production and industry, producers manual, errata, 28
 reprocessing, U.S. standards for grades, 13898
 table, U.S. standards for grades, 13899
 Mapping tungsten-reactor rocket engine as guide to operation and control, 9876
Maps and charts:
 aeromagnetic analysis of upper Mississippi Valley zinc-lead district, 4888
 aeromagnetic maps of Tintic Valley and adjacent areas, 8164
 aeromagnetic survey of Iron Springs district, Utah, geologic interpretation, 11173

INDEX 1967

Maps and charts—Continued

- alphanumeric map information assembly and display system for large computer, 14142
- cartographic records of—
 - American Expeditionary Forces, 1917–21, preliminary inventory, 14508
 - Forest Service, preliminary inventory, 14510
- cartography, USSR scientific research goals, 14257
- catalog of copyright entries, 12433
- Census Bureau, United States maps, GE-50 series, 1891
- census publications, price list, 7056
- Coast and Geodetic Survey—
 - aeronautical charts—
 - catalogs, 5939, 8998, 16084
 - dates of latest editions, 3191
 - flight information publications, dates of latest editions, 5192
 - instrument approach procedure charts, 8423
 - military fields, 3555
 - nautical chart catalog—
 - Alaska and Aleutian Islands, 216
 - Atlantic and Gulf Coasts, Puerto Rico and Virgin Islands, 4415
 - Pacific Coast, Hawaii, Guam and Samoa Islands, 7558
- DoD aeronautical chart updating manual, 3212
- Eastern Europe, cartography, new developments, Hungarian study, 15358
- Federal item identification guides for supply cataloging, supplements, 3292
- geodesy and cartography (Hungarian periodical), translations, 17872
- geological mapping in sea regions, USSR study, 9640
- Geological Survey, released only in open files, 9563, 15307
- grids and grid references, Army technical manual, 15945
- Image Interpreter map displays, chip versus hard copy, 4224
- large scale maps for city, construction and technical planning, requirements, 4981
- legibility of military map symbols on television, 63
- lunar charts—
 - AIC 57C, Encke, 7323
 - AIC 57D, Maestlin, 7324
 - AIC 61C, Secchi, 7325
 - AIC 75A, Flamsteed, 7326
 - AIC 75B, Wichmann, 7327
 - AIC 76A, Euclides P., 7328
 - AIC 76B, Fra Mauro, 7329
 - AIC 77B, Hipparchus, 7330
 - AIC 78A, Delambre, 7331
 - AIC 78B, Torricelli, 7332
 - AIC 79B, Messler, 7333
 - LAC 11, J. Herschel, 10224
 - LAC 12, Plato, 10225
 - LAC 23, Rumker, 10226
 - LAC 24, Simon Iridum, 7320
 - LAC 25, Cassini, 7321
 - LAC 26, Endoxus, 13263
 - LAC 27, Geminus, 15886
 - LAC 62, Mare Underarm, 7319
 - LAC 96, Rupes Altai, 7322
 - LAC 113, Maurolycus, 8865
 - LAC 114, Rheita, 4167
- lunar reference mosaic, earthside hemisphere, 4168, 15887
- map reading, field manual, 5726
- Naval Oceanographic Office, chart correction lists, 5337, 14582
- price list, 17134
- topographic, how they are made, 1648
- topographic mapping, report, 4891
- TVA Maps and Surveys Branch, general information, 1649
- Weather Bureau, daily synoptic series, 3181

Maps and charts—Continued

- see also* Aerial mapping—*also* names of localities—*also* subjects.
- Mar del Plata convention, text, 6065
- Marcelo, Bernardino D., relief, 13515, 13609, 13763
- Marchant, Jack D., solid-state electromigration of impurities in cerium metal, 5129
- Marcus, Emanuel, relief, 13589
- Marcus, L., compositions, coating or plastic, classification definitions, 8605
- Mare Underarm, LAC 62, lunar chart, 7319
- Marek, Czeslawa, *see* Piotrowski, Maria A.
- Maremont Corporation, adjustment assistance case pertaining to certain workers, excerpts from Tariff Commission report to Automotive Agreement Assistance Board, 5565
- Margason, Richard J., static calibration of ejector unit for simulation of jet engines in small-scale wind-tunnel models, 6899
- Mariana Islands, Guam, geology and hydrology (series), 1119
- Mariano, Frank A., Army aviation digest, 3996
- Marihuana, use on college campuses, hearings, 2128
- Marine biology:
 - biological research laboratory, La Jolla, Calif., use of land donated by University of California hearing, 746
 - survey of fifty years of Soviet work, 14236
 - USSR, hydrobiology, basic goals in current 5-year plan defined, 6522
- Marine Corps:
 - aircraft 1913–65, utilization, 17905
 - antimechanized operations, Fleet Marine Force manual, 16841
 - command and staff action, manual, 2533
 - commandant, appointment, etc.—
 - law, 12164
 - report, 10611
 - enlisted members, computing retired pay, report, 16270
 - First World War, annotated bibliography, 14310
 - Fleet Marine Force manual FMFM series, 2533, 6624–25, 8331, 12781–782, 15460, 16839–841
 - Harper's Ferry and in Civil War, historical reference pamphlet, 12784
 - historical bibliographies series, 14310
 - historical reference pamphlets, 8332, 12784, 14311, 17994–906
 - history of operations in World War II, central Pacific drive, 12783
 - Two Jima, battle and flag raising, 14311
 - logistics and personnel support, manual, 6624
 - management review (periodical), 3614
 - Marine Band, history, activities, etc., 9750
 - materials, transfer of excess to Army, expedited procedure, GAO review, 14163
 - 9th Marines, brief history, 17904
 - occupational opportunities, 16842
 - officers—
 - general, authorize increase—
 - hearing, 940
 - law, 444
 - report, 926
 - professional reading guide, 17079
 - register—
 - departmental edition, 11662
 - document edition, 10501
 - retired, register, 1546
 - outlook for your future as marine, career information, 15461
 - ribbons of decorations and awards (poster), 11663
 - serving America as woman marine, 11341
 - small unit action in Vietnam, summer 1966, 8332
 - terminal facilities guide, Defense Supply Agency handbook, 17690
 - uniforms, regulations, 8333
 - U.S., in southeast Asia, report, 10815

Marine Corps—Continued
 United States Marine Corps, 1966, 191st year of faithful service, 14312
 Washington, D.C., general information, 11342
Marine Corps Reserve:
 history, 1394
 mobilization in Korean conflict, 17906
 officers—
 general, active status, increase number, report, 14944
 retired, register, 1546
 reserve marine (periodical), 3828
Marine engineering, operation and maintenance, Navy officers' text, 7016
see also Naval engineering.
Marine geology, see Submarine geology.
Marine inspection, see Ships.
Marine investigation regulations and suspension and revocation proceedings, 10443
Marine museums in United States, 16843
Marine Resources and Engineering Development, National Council on, see National Council on Marine Resources and Engineering Development.
Marine safety and seamen's welfare act of 1967, draft bill, supplement, 16404
Marine science, see Oceanography.
Mariner, see Spacecraft.
Mariners, see Notice to mariners.
Mariners weather log (periodical), 3541
Marines, see Marine Corps.
Marquette County, Wis., Menominee iron-bearing district, geology, 6398
Marino, Vicente Fernandez, see Fernandez Marino, Vicente.
Maritime Administration:
 appropriations, require authorization—
 hearings, 4552, 7753
 law, 16137
 reports, 696, 9108, 9124
 current regulations, index, 11343
 financing operations of Government-owned vessels supporting military activities in southeast Asia, potential savings, GAO report, 14157
 introducing programs and activities, 5090
 performance and payment bonds on ship construction contracts, policy, etc., GAO review, 2350
 press releases, 3743
 report, 1966—
 departmental edition, 8334
 document edition, 7596
 SP series, 6626-27, 9751, 12787, 17907-908
Maritime Board:
 establish—
 hearings, 16335
 reports, 15,009, 16278
Maritime Consultative Organization, Intergovernmental, see Intergovernmental Maritime Consultative Organization.
Maritime industry, see Merchant Marine—Shipping.
Maritime navigation, see Navigation.
Maritime safety digest (periodical), 3542
Maritime safety specialists, examination announcement, 14867
Maritime services, see Shipping.
Maritime Subsidy Board, current regulations, index, 11343
Maritime traffic, see Ships.
Mark, Harold M., fallout characteristics from deeply buried nuclear detonation, 7426
Mark Twain National Wildlife Refuge, birds, list, 11803
Markers, slide marker devices for automotive vehicles, Federal standard, 6331
Marketing, see Markets and marketing.
Marketing Conference, National, see National Marketing Conference.
Marketing Research Advisory Committee, Agriculture Dept., required meetings to be held, reduce, report, 16361

Markets and marketing:
 acreage marketing guides, 962, 2134, 4661, 6127, 7828, 10872, 16441
 Africa, market profiles, 14880
 agreements and orders, statutes, compilation, 7262
 agricultural marketing (periodical), 2997
 agricultural marketing act of 1946—
 amend, report, 16361
 and regulations thereunder, 9332
 agricultural marketing agreement act, amend, hearing, 13693
 building U.S. sales in expanding world market (address), 4920
 business benefits from fair play in market place (remarks), 7582
 Chile, market for U.S. products, 2417
 Commerce Department—
 objectives for marketing and distribution (address), 245
 services to and for business (address), 1825
 creating new market places for private enterprise in cities, education and training, etc. (address), 10450
 crops, quotas and allotments, statutes, compilation, 7262
 dairy marketing economics, research publications, bibliography, 13950
 economics research publications, 13944
 effects on economic and social conditions (remarks), 242, 1060
 Federal-State market news service, California rice stocks and movement report, 3074
 foreign commercial markets (talk), 4818
 foreign crops and markets (periodical), 3344
 foreign market reports service, listing, 12653
 Government-business relations component in your marketing mix (address), 10329
 machine tool distributors, problems, report, 4514
 market factors in—
 India, 17477
 Spain, 13459
 market for U.S. products in Taiwan, 17853
 market indicators for Asia and Oceania, 9013
 market profiles—
 Latin American area, 13455
 Western Europe and Canada, 13462
 marketing and management practices, retail florist industry, graphic view, 13228
 marketing and public interest, selected issues and viewpoints (address), 226
 marketing and transportation, 3543
 marketing bulletin, 15858
 marketing information guide, annotated bibliography, 3544
 marketing research reports, 34-37, 1702-4, 4120-22, 5044-53, 7276-78, 8834-36, 10179-181, 11033-935, 13228, 14751, 15859-864, 17322
 national conference, 10465
 new role of Commerce Dept. in marketing (address), 227
 premium on marketing, trillion dollar economy (address), 8924
 sample display service, new way to find agents and distributors overseas, 4923, 14207
 Scandinavia today, billion dollar U.S. market, 9003
 small marketers aids, annual compilation, 2858
 see also names or classes of commodities, etc., marketed.
Marking, Lelf L., investigations in fish control, 8033
Marking:
 ammunition components, inert, for shipment, military standard, 10599

INDEX 1967

- Marking—Continued**
country or origin marking requirements on U.S. imports, 7842
fish with dyes and other chemicals, 4812
identification marking of—
administrative wheeled vehicles, military standard, 4678
aluminum, magnesium, and titanium Federal standard, 8008
nickel and nickel base alloys, Federal standard, 16603
identification of combat and tactical transport vehicles, 12443
industrial, industrial plant equipment handbook, 7850
iron and steel products, Federal standard, 2269
price marking—
cases at grocery warehouses, use of adhesive labels, 10155
meat and poultry in retail food stores, systems and equipment, 7276
steel products, recommendations of trade, amdt., 6920
supplies and equipment, AMC pamphlet, 4192
Marksmanship, see Shooting.
Markwalter, George, claim, 7619
Marquesas Islands, *see* French Polynesia.
Marquette Iron Range:
flotation procedures for fine-grained hematite ores, laboratory, etc., development, 14335
water resources of area, 14183
Marquis, David A., germination and growth of paper birch and yellow birch in simulated cuttings, 4849
Marriage:
characteristic of metropolitan population, 10360
District of Columbia license, blood test and waiting period requirements, transfer authority to waive—
law, 13533
reports, 12384, 13641
documentary requirements for United States citizens in Italy, agreement, 15767
marital status, Mar. 1966, population characteristics, 4350
United States, 1962, statistics analysis, 5471
vital statistics of U.S., 10070
Married persons, see Husbands and wives.
Mars, Lawrence L., exploratory cost-benefit analysis of vocational rehabilitation, 18196
MARS, see Military Affiliate Radio System (MARS).
Mars (planet):
atmosphere—
flyby measurements of profiles of water vapor, etc., 15569
investigation, 5276
properties, feasibility study of experiment for determining, 14371
Earth-Mars-Earth flight, minimum time with unregulated low-thrust engine, USSR study, 17881
Mariner IV, review of results, 14402
meteorology, summary of available knowledge, 11410
nominal natural environment for advanced planetary mission programs, 8436
physical properties, handbook, 15516
Voyager 1975 mission, space flight investigations, opportunities for participation, 17019
see also Satellites.
Marsetta, Marion E., legibility of military map symbols on television, 63
Marsh, K. R., V/STOL concepts for short-haul transport aircraft, 5171
Marshall, George C:
20-cent regular postage stamp—
ceremony (address), 18135
poster, 154647
Marshall, Thurgood:
nomination—
hearings, 13876
report, 15062
Marshals:
Federal, appointment records, pamphlet to accompany microcopy Idaho, Territory and State, 18071
United States, appointment by Attorney General, hearings, 2054
Marson, Frank M., bibliography on snow, ice, and frozen ground, 14791
Marti Priete, Marcial A. (Alfrede), relief, 347
Martian atmosphere, *see* Atmosphere.
Martin, Clark S., Santa Rita Experimental Range, center for research on improvement and management of semidesert rangelands, 2331
Martin, D. O., interstate air pollution study, meteorology and topography, 11739
Martin, E. Dale, method of asymptotic expansions for singular perturbation problems with application in viscous flow, 9885
Martin, J. Rod, growth and capital accumulation of farms in rolling plains of Oklahoma and Texas, 17336
Martin, E. O. R., reservoirs in United States, 4895
Martin, Troy C., fluorescent excitation using isotopic X-ray emission, 5779
Martin, William M., Jr.:
remarks—
Jan. 30, 1967, 4787
May 16, 1967, 11058
June 26, 1967, 12536
Martin Company workers, reemployment experiences, effects of defense employment readjustments, 5729
Martin Del Campo, Roberto, relief, 13608, 17535
Martin Ruiz del Castillo, Antonio, relief, 15068, 16223, 17525
Martin River and Valley, area, geomorphic effects of earthquake, 2370
Martinez, Alberto L., relief, 579
Martinez, Eleanor R. Diaz, *see* Diaz, Beatriz.
Martinez, Mario G., relief, 9218, 12236, 13494
Martinez-Farinas, Luis O., relief, 13743, 16190, 17504
Martinez Torres, Rafael P., relief, 335, 571
Martinez y Corpas, Miguel A., relief, 259, 871
Martinson, R. Kahler, factors influencing waterfowl counts on aerial surveys, 15268
Marty, Robert:
compound interest tables for long-term planning in forestry, 13212
planning for timber-tract development, 11137
Martz, Helen E., national blueprint for public welfare, 4897
Martz, Richard L.:
auditory vigilance as affected by signal rate and intersignal interval variability, 11346
bibliography and index of research in human and animal vigilance, 9753
signal presentation rate, auditory threshold, and group vigilance, 11349
Maryland:
area measurement reports, 5812
census of agriculture, 1964, State and county statistics, 7508
census of manufactures, 1963, area statistics, 157
census of mineral industries, 1963, area statistics, 5829
climatological data, 3096
congressional districts, 90th Congress, 5901
construct, maintain, and operate additional bridges and tunnels across or under Chesapeake Bay, report, 16273

Maryland—Continued

county business patterns, 1864, 13374
 differential assessment of farmland near cities, experience, 17712
 electric rate book, 4774
 fossil marine mammals from miocene Calvert Formation, 1530
 landings, fish and shellfish, 3545, 17770
 mineral industry, minerals yearbook chapter, 5116
 precipitation data, hourly, 3401
 site index of sweetgum stands in relation to soil characteristics, 4832
 timber resources, 17808
 transit compact, approval—
 hearing, 2132
 law, 478
 report, 654
 women, legal status, 1667
 yellow-poplar, treatments needed to regenerate, 17504
Maryland-National Capital Park and Planning Commission, information system for urban planning, 11207
Maryland tobacco, see Tobacco.
Marysville Dam and Reservoir:
 engineer report—
 departmental edition, 1027
 document edition, 525
Masers:
 bibliography, 14407
 hydrogen maser as highly stable frequency reference, 11475
 parametric up-converter increases flexibility, 9859
Mascia, William J., liquid surface motion in response to lateral acceleration during weightlessness, 12966
Masked DL for pitch memory, 11348
Masked form of messenger ribonucleic acid, USSR, 6539
Masking materials, silver-palladium braze alloy, recovered from, 6793
Masks, protective, available for agricultural workers in USSR, description, 2457
 see also Oxygen masks.
Mason, Brian, composition of Allegan, Burghelua, and Cynthiana meteorites, 18059
Masonry, concrete masonry construction for cabins, building plan, 5664
Masons:
 safe work guide, 11304
 stone and brick, examination announcement, 10415
Mass (physics):
 dynamic characteristics of variable-mass slender elastic body under high accelerations, 5188
 realistic uncertainties and mass measurement process, illustrated review, 15592
Mass rearing fall armyworm in laboratory, 8805
Mass spectra, see Spectra.
Mass spectrometers, see Spectrometers.
Mass spectrometry, see Spectrometry.
Mass Spectrometry Section, Analytical, see Analytical Mass Spectrometry Section.
Mass spectroscopy, see Spectroscopy.
Mass transfer:
 characteristics of axial-flow liquid-core nuclear rocket, 14497
 heart and mass transfer at stagnation point, 12869
 in capillaries and porous media, 8211
 in stainless steel-Cb-1Zr-potassium system, and effect of stabilization of carbon and nitrogen in stainless steel, 12864
 saline water systems, properties, 2393
 sublimation from snow-surface, investigation, 4198
 through liquid interface, mechanism, 8215
Mass transportation, see Transportation.

Massachusetts:

area measurement reports, 10336
 bus taxation proration compact, consent of Congress, law, 440
 census of agriculture, 1964, State and county statistics, 7501
 census of mineral industries, 1963, area statistics, 5830
 county business patterns, 10345, 10349
 electric rate books, 1055, 15246
 geology of selected quadrangles (series), 6389, 9560
 housing discrimination in Springfield-Holyoke-Chicopee metropolitan area, report, 4385
 Ipswich River basin, water resources, 6411
landings—
 by ports, 1966 summary, 12543
 fish and shellfish, 3546
Massee, T. W., moisture conservation for wheat production, 4088
Masser, Charles C., vapor pressure data extrapolated to 1000 atmospheres for refractory materials, etc., 18015
Mastenbrook, Henry J., water vapor observations, 5362
Masters of ships, see Shipmasters.
Masterton, William J., relief, 7626, 12348, 13475
Matamoros, Mexico, despatches from U.S. consuls, microcopy, pamphlet to accompany, 18060
Matanuska River and Valley, Cretaceous ammonites from Matanuska Formation, 8170
Matching studies series, 8955
Materials:
 Army and Marine Corps, transfer of excess, expedited by improved procedure, GAO review, 14163
 atomic—
 AEC-contractor management meeting, 13316
 development programs, summaries, 4238
 program, AEC authorizing legislation, 1968, hearings, 10491
 beautiful junk, inexpensive materials for preschool program, 17709
 building materials, USSR industrial development, translations, 4017
 defense materials system program identification symbols, used in segregating renegotiable and nonrenegotiable subcontracts, 13105
 distribution and receipt, Atlantida, household sample surveys, 1885
 future in materials (address), 17472
 hard superconductive, ac properties determined by simple technique, 6817
 high temperature bearing cage materials, evaluation, 5274
 industries, East European, translations, 3957
 laser, research, 5344
 nuclear, *see, above, atomic.*
 opaque, surface temperature measurements with pyrometry, 2649
 preservation, packaging and packing, Federal test method standard, 16605
 pyroelectric, research program, 5159
 reactor, quarterly technical progress review, 3807
 science—
 Communist Chinese abstracts, 3122
 East European abstracts, 3223
 USSR abstracts, 4030
 selected materials consumed, 1963 census of manufacturers, 4277
 selected, thermal conductivity, 1523
 solid, mass spectrometer analysis with ion-microprobe sputter source, 5178
 spacecraft, metallic materials and elements for aerospace vehicle structures, military handbooks, 7860, 9370

INDEX 1967

Materials—Continued
 standard reference materials, National Bureau of Standards—
 catalog and price list, 17033
 quarterly insert sheets, 1519, 11582
 new materials, publications, etc., 11588
 news for users of, 12987
 organic, 18081
 strength and plasticity, USSR research on scientific bases, 2453
 structural—
 high strength, metallurgical characteristics, 5363, 10014
 isostatic compression process converts polyaromatics into, 12898
 thermal protection, sensors to obtain in-flight ablation measurements, development, 1494
 thermoluminescent, emission spectra, 1552
 thermoplastic rubberlike, low cost production, 2623
 trace characterization, chemical and physical methods, measurement methodology, 12985
see also Coating materials—Composite materials—Wicking materials—*also* names of materials.
Materials handling:
 Army technical manual, changes, 7402, 14803
 equipment. Federal item identification guides for supply cataloging, supplements, 3285
 feeders, industrial plant, equipment handbook, 6141
 radioactive, international traffic, 7432
 safety in industry, instructor outline, 9681
 standard time data, manual 10898
 change, 17699
 technical manual, 115
Materials Research Institute, *see* Institute for Materials Research.
Material, *see* Military supplies.
Mathematical models, *see* Mathematics.
Mathematicians:
 Army, 12th conference, transactions, 8876
 examination announcement, amendment, 4388
Mathematics:
 algorithms—
 for approximate solution of resource distribution problem, etc., 17868
 for synthesis of asynchronous sequential circuits, 1473
 ambiguity function independent of assumptions about bandwidth and carrier frequency, 8598
 application of mathematical methods in military affairs, USSR book excerpts, 15359
 applied, computers, and information models, USSR study, 16735
 applied mathematics series, 14513
 asymptotic—
 behavior of solutions of boundary problems for quasilinear differential equations, 11573
 expansions method for singular perturbation problems with application in viscous flow, 9885
 celestial mechanics, new methods—
 integral invariants, periodic solutions of 2d type, doubly asymptotic solutions, 11561
 Newcomb, Gylden, Lindstedt, and Bohlin methods, 11560
 periodic solutions, non-existence of integral invariants, asymptotic solutions, 9921
 choice of parameters of influence functions using analog computer, 1181
 communications-electronics, principles and applications, technical manual, change, 15953
 Communist Chinese abstracts, 3123
 computer programs, compilation, 5196

Mathematics—Continued
 computer solution of exponential decay or washout curves, evaluation, 15894
 course and curriculum improvement projects, 5324
 decision model algorithm of Leont'yev type, 17879
 East European abstracts, 3224
 economic-mathematical research at Atlantiro, 1202
 economic planning aided by, USSR, 1328
 educational activities, USSR, 1341
 instruction, financial assistance guidelines under NDEA, 13956
 mathematical methods of interpreting and evaluating proteinogram and their practical significance, USSR study, 12694
 mathematical problems of cybernetics and computer engineering, USSR study, 16754
 mathematical theory of critical state of reactors, certain problems, USSR study, 15357
 mathematics and mathematical physics, journal of research, National Bureau of Standards, 3459
 mathematics, in space science (series), 8513
 Mathien functions, tables, 14513
 minimum initial impulse under arbitrary initial velocity vector, optimum transfer between 2 terminal points, 1427
 model of method of orbit adjust and station keeping gravity-oriented satellites, 2688
 national defense education act, loans to private nonprofit elementary and secondary schools for equipment and materials, 1907
 Navy training course, 7020
 optimal training algorithms for automatic systems in case of nonideal teacher, USSR study, 9619
 periodic solutions for restricted 3-body problem of celestial mechanics, 9813
 problem of meeting movements, USSR study, 15427
 proper rotations of 3-dimensional orthogonal frame, 6861
 quadratic-regression analysis, fitting surfaces to assay and other three-dimensional data, computer method, 2580
 research, summaries of projects supported by AEC, 12015
 Rumania, center for mathematical statistics, activities, 1195
 scientific tests, standards, publications, price list, 2804
 stability theory of multistep methods, 11523
 statistical technique for dynamic analysis of vehicles traversing rough yielding and non-yielding surfaces, 8407
 tables—
 folded-sin x/x coefficients, 4413
 Hadron production reactions, consequences of unitary symmetry, 5759
 interference factors for use in correcting data from VTOL models in wind tunnels with 7 by 10 proportions, 9825
 teachers in Peace Corps, 5350
 technician, examination announcement, 1910
 USSR abstracts, 4031
 voting function for continuous quantities, USSR study, 8263
 Weber functions and derivatives, FOR TRAN program for computation, 8484
see also Algebra—Arithmetic—Equations—Integration (mathematics)—Optimal processes—Programming (mathematics)—Randomness (mathematics)—Transformations (mathematics).
 Mathematics aids, mathematics technicians, examination announcement, 13445

- Mather, Bryant, cement performance in concrete, 16528
- Mather, J. Warren, major regional co-operatives handling supplies, 7943
- Mathers, Boyd L., different viewing devices for photo interpretation, 10283
- Mathews, David R., properties of vanadium-base tungsten and chromium alloys, 9780
- Mathias, Adrian J., mine production-scheduling model, etc., for long-range mine planning, 9786
- Mathieu functions, tables, characteristic values, coefficients and joining factors, 14513
- Mathis, Billy, oil and gas lease, reinstated, 530, 12324
- Mathur, S. C., gamma ray angular distribution coefficients, 12013
- Matrices (mathematics):
- matrix algebra, basic properties, 15464
 - matrix analysis of longitudinal and torsional vibrations in nonuniform multi-branch beams, 6886
 - matrix-Holzer analyses for fully-coupled vibrations of clustered launch-vehicle configurations, 5158
 - stiffness matrix solution for shells of revolution possessing variable thickness heat protection, 11514
 - structural analysis and matrix interpretive system, (SAMIS), 12899
 - transformation to phase-variable canonical form, 12923
- Matter of life and death, 5377
- Matter, particulate, profile in Martian atmosphere, flyby measurements, 15569
- Matthal, Howard F., measurement of peak discharge at width contractions by indirect methods, 14176
- Matthews, Earle D., soil survey of Queen Annes County, Md., 2874
- Matthews, Howard A., educating for 21st century manpower needs, tomorrow is now, 17717
- Matthews, Ralph, jr., communities in action, 3124
- Matting, Fred W., surface ablation of non-charring materials, 2724
- Mattresses, current industrial reports, 3169, 8941
- Mattson, Peter H., Cretaceous and lower Tertiary stratigraphy in west-central Puerto Rico, 17820
- Maughan, Edwin K., Big Snowy and Amsden groups and Mississippian-Pennsylvanian boundary in Montana, 15309
- Mauglialardi, Gino J., effects of grid-bar air wash on efficiency of lint cleaners and fiber quality of cotton, 14759
- Maul:
- Iao Stream, engineer report—departmental edition, 13977
 - document edition, 13559
- Maumee River:
- basin, engineer report—departmental edition, 2212
 - document edition, 2001
- Maurer, Alan O.:
- basic data on economy of—Fed. Rep. of Germany, 10463
 - Italy, 16107
- Mauritania:
- background notes, 8709
 - capsule facts for Armed Forces, 10247
 - labor conditions, 1381
 - Peace Corps volunteers, agreement, 7177
- Mauritius, labor conditions, 1382
- Maurolucy LAC 113, lunar chart, 8865
- Mavrodineanu, R., bibliography on flame spectroscopy, analytical applications, 8519
- Maxie, E. C., radiation technology in conjunction with post-harvest procedures as means of extending shelf life of fruits and vegetables, 5792
- Maximum principle, *see* Principle of the maximum.
- Maxwell, Armine J., soil of Love County, Okla., 8699
- Maxwell, John A., claim, 13586
- May, Timothy C., pumice, 1407
- Maya, Jacobo Albo, *see* Albo Maya, Jacobo.
- Maybe Creek, geology of Umat-Maybe Creek region, 8159
- Mayer, Jean, obesity and health, 1585
- Mayes, Herman F., electrically operated gates for livestock markets, 10153
- Mayonnaise:
- and related products—current industrial reports, 12079
 - industry reports, 145-146, 12028
- Mayors of each city with local airline service, CAB letter, 3937
- Maypa, Visitacion E., relief, 16199
- Maysville, Ky., Upper Ordovician formations in area, 2361
- Maytin, Orlando H., relief, 15071, 16225, 17527
- Mazy, R. S., internal restraint system for integrated restraint-pressure suit system, 6727
- MB-5, *see* Firefighting vehicles.
- MB series, 2962
- MDTA (Manpower development and training act) *see* Manpower.
- Mead, Margaret, changing cultural patterns of work and leisure, 5042
- Mead, Robert L., power from radioisotopes, 7444
- Meade, Robert H., petrology of sediments underlying areas of land subsidence in central California, 12607
- Meader, Willard L., decompression sickness in high-altitude flight, 14778
- Meal:
- domestic corn meal bulletin, 3215
 - enriched cornmeal, good choice for thrifty family, food value, use, recipes, 10576
 - export corn meal—port bulletin, 3248
 - price bulletin, 3249
 - oilseed meals, production and use, post-war trends, 9391
- Mealey, Charles, computer-controlled central digital data acquisition system, 11492
- Meals, *see* Food.
- Means for improving apparent resolution of television, 11478
- Measles, rubella, general information, 14626
- Measure before you buy used clothes for your school boy or girl, 7284
- Measurements:
- Aerospace measurement techniques, symposium, 6734
 - local, in turbulent flows through cross correlation of optical signals, 8462
 - meteorological, new methods, USSR studies, 11272
 - pacemaker of American economic growth, 7563
 - peak discharge at dams by indirect method, techniques, 9576
 - peak discharge of streams by—indirect method at width contractions, 14176
 - indirect method, techniques, 11184
 - slope-area method, techniques, 11185
 - remote measuring systems, computer program determines performance efficiency, 2638
 - repeated design on experimental units in 2-way classification, analysis, 7348
 - results from full-scale measurements of midship bending stresses on 2 dry-cargo ships, 10076
 - vacuum and low pressure, bibliography and index supplement, 12984
 - velocities in air, evaluation of smoke-wire technique, 10293
 - see also* subject of measurement.
- Measures, *see* Metric system—Weights and measures.

INDEX 1967

Measuring instruments :

Federal item identification guides for supply cataloging, supplements, 3286
 system enables dimensional inspection of very large structures, 14422
 web belt load measuring instrument has excellent stability, 14436
 weighing and measuring devices, specifications, etc., replacement pages, 6914
see also Electronic measuring instruments.
 Measuring quality of housing, appraisal of census statistics and methods, 13413
 Measuring tools, *see* Measuring instruments.

Meat :

agricultural commodity grader (meat), examination announcement, discontinuance notice, 16076
 canned chopped or luncheon, good choice for thrifty family, food value, use, recipes, 9351
 commercial production, 11879
 foreign agriculture circulars, 3345
 freezing in home, 31
 how to use USDA grades in buying, 5671
 Industry—
 Argentina, 11099
 Mexico, 8048
 New Zealand, 11097
 Uruguay, 11098
 inspection act, amend—
 hearings, 15011
 reports, 16255, 17579
 inspection, Federal, 1966 statistical summary, 6130
 inspection procedures manual, 3537
 inspection regulations of USDA, 3814, 6132
 institutional purchase specification, approved by USDA portion-cut products, 7838, 12429
 livestock and meat situation, 3517
 livestock-meat economy, simulated inter-regional models, 12453
 luncheon meats, what label means, 966
 market news weekly summary and statistics, 3518
 marketing and price information, Texas and Oklahoma, 13941
 packaging and price marking in retail food stores, systems and equipment, 7276
 processing plants, chemical compounds authorized for use under USDA inspection programs, lists, 10878, 16445
 products, processing, new technological methods, 6546
 quality, effect of malnutrition of young cattle, 14765
 quality products, expanding exports, report, 10794
 statistics—
 1965 supplement, 4143
 1966 supplement, 13248
see also Packing industry.

Meat animals, *see* Livestock.

Mechanical absorption of acoustic oscillations in simulated rocket combustion chambers, 5264

Mechanical designs, *see* Designs (industrial).

Mechanical engineering :

Navy design manual, changes, 2765
 research of TVA Engineering Laboratory, 17260

Mechanical fans :

airborne lightweight high-efficiency radial fan, aerodynamic testing, 10292
 current industrial reports, 3170, 12070
 industrial plant equipment handbook, 4674
 lift and lift-cruise, aerodynamic characteristics of V/STOL transport model, 14484
 lightweight structural design techniques for lightweight fans, 117

Mechanical impedance and mobility concepts, 5353

Mechanical mobility, concepts and mechanical impedance, 5353

Mechanical power transmission, *see* Power transmission.

Mechanical samplers, *see* Samplers.

Mechanics, dissertations on, defended at Ukrainian Institutes in 1965, 1302

Mechanics (persons) :

apprentices, examination announcement, amdt., 203
 aviation, inspection authorization, handbook and study guide, 14013
 aviation structural mechanics—
 H 3 & 2, Navy training course, 18105
 S 1 & C, Navy training course, 17078
 cash register repairmen, apprenticeship and training policy, 7373
 construction mechanics 3 & 2, Navy training course, 7013
 machinery repairman—
 1 & C, supplement, 11658
 3 & 2, supplement, 11658
 schools, Federal aviation regulations, 11002

Mechanics (science) :

penetration of high speed particles, multivariable analysis, 6708
see also Quantum mechanics

Mechanism of conditioned reflexes and memory, USSR, 5014

Mechanism of deuteron breakup by 42-Mev alpha particles, 18032

Mechanism of mass transfer through liquid interface, 8215

Mechanism of memory, USSR, 8268

Mechanisms of superconductivity investigated by nuclear radiation, 9830

Mechanization :

AEC library, legislative information, 5790
 base procurement mechanization, Air Force, 10211
 technical research status surveyed in Hungary, 15415

Medals :

commemorative—
 centennial of completion of 1st transcontinental railroad, report, 13822
 Ellis Island designation as part of Statue of Liberty National Monument—
 law, 394
 report, 899
 land bank system—
 law, 397
 report, 690
 Navy Civil Engineers Corps 100th anniversary, law, 487
 1,000th anniversary of founding of Poland, law, 361
 Seabees 25th anniversary, law, 487
see also Decorations of honor—*also* names of medals, or persons to whom medals are to be presented.

Mediators, National Mediation Board, examination announcement, 14868

Medical advisory boards for driver licensing, 8638

Medical and Surgery Bureau, Navy, manual of Medical Department, change, 9752

Medical bulletin, Medicine and Surgery Dept., VA, 2962

Medical care :

aeromedical evacuation, patients' views of patient care, 17350
 aged and chronically ill, charges for care in institutions, 17169

aged persons—

costs and delivery of health services to older Americans, hearings, 17633
 health insurance, extend deadline for enrollment—
 law, 16142
 report, 16264
 health insurance, hospital manual, 10084
 health insurance, initial operating data, 5515

Medical care—Continued

aged persons—continued
social security amendments of 1967—
hearings, 15154, 16409
reports, 14953, 14964
summary, 15053
Air Force manual, 10221
assistance under social security act,
amend title 19, report, 697
Canada, legislation, 5516
chart book, National Conference on Medi-
cal Costs, 14185
comprehensive care services in your com-
munity, 5426
coordinated home care programs—
development and administration, guide,
5432
1964 survey, 8625
disabled workers, data on utilization,
17202
District of Columbia—
participation under title 19 of social
security act, report, 13645
under 1965 social security amendments,
enable to participate in benefits,
hearings, 10645
extended care facilities, providers of ser-
vices under health insurance for the
aged, directory, 15738
facilities available to Federal employees
injured in performance of duty, 16514
facility projects approved for Federal aid
under Hill-Burton program, register,
3398, 8633, 18169
financing and utilization, source book of
data through 1961, selected revisions,
15685
Foreign Service, etc., benefits in high-risk
situations, report, 10768
home care training center in United
States, 1578
home care, what it is, 5436
home health agencies, providers of ser-
vices under health insurance for the
aged, directory, 11793
home health care, planning, summary of
development, following medicare and
medicaid, 10057
home health services in your community,
11735
hospitals, providers of services under
health insurance for the aged, directory,
11794
how much does medicare pay for outpa-
tient hospital services, 11797
inquiry into alleged improper practices in
providing services to old-age assistance
recipients in Cleveland, Ohio area, GAO
report, 8150
insurance contract, recovery of excess
funds accumulated, GAO review, 8145
medical assistance, medicaid, questions
and answers, 10972
medical self-help training, if disaster
strikes and there is no doctor, course,
announcement, 11738
medical service—
duration of illness, Air Force pamph-
let, 8858
field sanitation team training, Army
pamphlet, 10264
medical services and facilities on board
spacecraft, USSR study, 8245
medicare—
almost 65? important information,
5509-10, 8688
and extended care facility, what it
means to you, 7125
extend program, message from the
President, 12198
general information, 5506
health insurance statistics, current sur-
vey report (series), 17197
hospital and medical insurance for peo-
ple 65 or over, 5511

Medical care—Continued

medicare—continued
how it helps when entering hospital,
5513
insurance claims, methods of payment,
7127
payments to agency providing home
health benefits, 7128
program, extended care benefits after
hospitalization, 2865, 11796
provider costs, reimbursement princi-
ples, 5503
railroad retirement beneficiaries who re-
ceive social security payments, 15739
services by hospital-based physician, re-
imbursement principles, 7119
supplementary medical insurance, ser-
vices used, survey, 17197
your list \$50 of medical expenses meets
calendar-year deductible, 7126
your health insurance, facts, 18209
military medical benefits act of 1966—
law, 365
reports, 664, 14941
needs for services revealed by Operation
Medicare Alert, 937
new title 19, medical assistance pro-
gram, brief summary, 2228
paid through public assistance to vendors,
utilization, 10974
physician speaks on home care, 7082
prices, report to the President, 8194A
provision by Public Health Service, legal
aspects, 1582
public assistance—
medical services on emergency basis to
any individual to prevent loss of
life due to lack of medical atten-
tion—
hearing, 17587
report, 15080
vendor payments—
by program and source of funds, 9436
by type of service, 10971
recipients, etc., 13997, 16542
self-help training, course, family guide,
emergency health care, reference guide
for students, 4378
self-help training, Danny Thomas in dra-
matic motion picture, announcement,
13077
training homemaker-home health aide in
personal care, 15714
uniformed services health benefits pro-
gram, 13287
USSR, measures to improve medical ser-
vice of population, 6538
VA nursing home care programs, opera-
tion hearings, 15050
veterans—
grants-in-aid, agreement with Philip-
pines, 14685
history of Veterans' Administration
medical program, 12318
veterans' views on care in VA hospitals,
1967 survey, 10683
Veterans Administration program, opera-
tions, 9173
see also Health insurance.
Medical certificates:
physicians' medical certification, death,
fetal death, and birth, handbook, 13088
reviewing and acting on, FPM manual
supplement, 3299.
Medical Costs, National Conference on, see
National Conference on Medical Costs.
Medical Department, Army, neuropsychiatry
in World War II, 13311
Medical Department, Navy:
manual, changes, 1395, 5088-94, 6630,
9752, 11345, 14315-316
support to Fleet Marine Force, 5092
Medical education, see Medicine.
Medical examinations, see Physical exami-
nations.

INDEX 1967

Medical examiners, handbook on death and fetal death registration, 15695.
 Medical facilities, *see* Hospitals.
 Medical industry, USSR medical industry (periodical), translations, 4023
 Medical institutions, *see* Clinics—Hospitals.
 Medical instruments and apparatus:
 electronics, new devices developed, 1264
 Federal item identification guides for supply cataloging, supplements, 3290.
 USSR—
 description, 12722
 new medical apparatus, 17877
 Medical insurance, *see* Health insurance.
 Medical Insurance Trust Fund, Federal Supplementary, *see* Board of Trustees of Federal Supplementary Medical Insurance Trust Fund.
 Medical journals, index medicus, cumulated, 6940
 Medical laboratory technicians, medical laboratory assistant, suggested guide for training program, 4714
 Medical literature, translations, bibliography (periodical), 3057
 Medical Museum of Armed Forces Institute of Pathology:
 hall of medicine, general information, 2153
 leaflets, 2153, 12442
 Medical Nutrition Laboratory, *see* Army Medical Research and Nutrition Laboratory.
 Medical occupations, careers as medical auxiliaries, 17455
 Medical officers, naval, residencies and specialty courses, 1396
 see also Physicians.
 Medical practice, *see* Medicine.
 Medical records:
 information on chronic conditions compared with interview data, 11762
 organizing health record systems, guide for nursing homes and homes for aged, 7072
 Medical research, *see* Medicine.
 Medical restraint of trade act, hearings, 17661
 Medical schools, USSR, medical training improvements sought, 15407
 Medical service, *see* Medical care.
 Medical supplies:
 central sterile supply section of packaged disaster hospital, organization, 1577
 Federal item identification guides for supply cataloging, supplements, 3290
 hospital central services, manual, 1579
 treatment tray and sets prepared in hospital, cards, 1592
 Medical technicians, USSR, medical worker's day celebration, 2476
 Medical technologists:
 examination announcement, 10412
 grants for training program improvement law, 463
 Medical zoology, *see* Zoology.
 Medicare, *see* Medical care.
 Medicated man (address), 14075
 Medicine:
 Academy of Medical Sciences, USSR—
 nominations, 5022
 pediatrics session, report, 2461
 aeromedical reviews, 4174, 7340, 11953, 14769
 aerospace—
 bibliographies, 1442, 2620, 5197-98, 6739, 8444-45, 11434, 12883, 14408, 15519, 16934-935
 cumulative index, 8443
 central nervous system functions, effect of spaceflight factors, 12973
 contaminants produced by man in space cabin simulator, 11955
 trace contaminants contained in samples from closed environment at 258 mm.hg, analysis, 10234

Medicine—Continued
 associate training programs, medical and biological sciences, NIH, 5420
 aviation medical education series, 5801, 8920-21, 14811
 aviation medical report AM series, 136-141, 1820-23, 4248-55, 5802-4, 7448-47, 10320-322, 13351, 14812, 15979-881, 17410-414
 bibliographies—
 medical reviews, 15597
 medical translations, annual index, 14526
 classification, Library of Congress, 5088
 clinical medicine, USSR periodical, translations, 1347
 clinical observations of man in oxygen-hellum atmosphere, 90
 compartments, pools, and spaces in medical physiology, symposium, 15959
 compressed air, diving and submarine medicine, bibliographical sourcebook, 6628-29, 14314
 control sciences applied, USSR studies, 1322
 dollars for medical research, 1947-66, sources and performers, 10062
 education of health service personnel—
 clarify responsibility of VA, law, 489
 Public law 89-785, lack of implementation by VA hearings, 16344
 electronics application, USSR research, 4970
 experimental and clinical, trace elements, USSR book review, 1344
 fallings noted of Gor'kiy Medical Institute, USSR, 4936
 film reference guide, 13073
 future international meetings, world list, 4073
 group practice facilities, financial assistance for constructing and equipment, law, 465
 summary, section-by-section analysis, legislative history, and conference report, 725
 group practice facilities program, information guide and instruction handbook, 14024
 index of medicine, general information, 2153
 index medicus, 3407
 cumulated, 6940
 internal, residency training, Veterans Administration Center, Dayton, Ohio, 15818
 Khabarovsk Medical Institute, recent developments, 2450
 medical advertising, compendium, 14074
 medical and biological problems of spaceflights, 1315
 medical benefits from space research, 17948
 medical bulletin, 2962
 medical cybernetics, introduction, 14503
 medical education problems in Tadzhikistan, 2474
 medical educational extension service program, USSR review, 2433
 medical ethics and research, symposium, 18247
 medical news letter, Medical and Surgery Bureau, 3547
 medical research, 15597
 development in Belorussian SSR, 12731
 program 1966, Veterans Administration, synopsis, 2963
 reports from Priroda, 16778
 Veterans' Administration, reports, 4563, 7218
 medical science in Georgian SSR, 1155
 medical subject headings, 3407
 cumulated, 6940
 medical training costs too much, 10934
 medical training in Veterans Administration, 8782
 medicated man, use and abuse of drugs (address), 14075

Medicine—Continued

- Navy, statistics, quarterly, 3904
- notes for medical catalogers (periodical), 3639
- notes on biometry in medical research, 17284
- preventive, residency training under public health traineeship, program, 7090
- program, AEC authorizing legislation, 1968, hearings, 10491
- regional medical programs, guidelines, 13076
- rehabilitation counselor, survey, medicine and medical practice for, instructor's manual, 10128
- research highlights, NIH work, 10061
- resources for medical research, report, 10062
- School of Aerospace Medicine, technical reports, 65-92, 1730-44, 4175-87, 5706-15, 8868-69, 7341-70, 10231-244, 11954-967, 13269-272, 14770-782, 15894-901, 17346-363
- scientific information needed, USSR study, 13413
- simulation, USSR study, 15356
- space—
 - clinical, problems from hazards of space operations, 14399
 - contaminants in closed ecologic atmospheres, analysis, 7350
 - programmed physiological measurements, 6533
 - Soviet conference, reports, 1228
 - trace constituents of closed ecologic system, delineation program, 7369
 - trace elements, USSR studies, 6542
 - tracer theory for analysis of whole-system retention data, turnover compartmentalization, 12012
- USSR—
 - Academy of Medical Sciences, vestnik (periodical), 4036
 - better coordination of research and practice urged, 6500
 - expansion in medical research needed, 1289
 - medical history reviewed, 14227
 - medical organizations, news, 1226
 - medical research praised and criticized, 6567
 - prospects and achievements, 15380
 - translations, 14271
- see also Veterinary medicine.
- Medicine and Surgery Department, Veterans Administration :
 - clarify, improve, and add programs, law, 489
 - medical bulletin, 2962
 - medical education, etc., Public law 89-785, lack of implementation, hearings, 16344
- Medicines :
 - and other pharmaceutical preparations dispensed by pharmacies without physician's prescription, Czechoslovakian list, 12673
 - cost and acquisition of prescribed and non-prescribed medicines, July 1964-June 1965, United States, 5467
 - medicinal chemicals, synthetic organic production and sales, 18238
- see also Drugs.
- Medico-moral ethics for hospital ministry, 15817
- Medico-physiological incidences on pilot for flight patterns typical of VTOL, 11563
- Mediterranean Sea :
 - contributions to hydrology of Africa and Mediterranean region (series), 11189
 - expedition on board USSR research vessel, Akademik S. Vavilov, results, 15352
 - lights and fog signals, list, changes, 1538, 5333, 11643, 18100
 - notice to mariners, 3641
 - radio navigational aids, changes, 5336, 9074, 11646, 14580, 18102

Mediterranean Sea—Continued

- radio weather aids, 1540, 9975, 14581
- sailing directions, changes, 11635, 15627-628, 17072, 18097
- tide tables, 12120
- Meehan, Eugene J., introductory science, USAFI exercise book, 7845
- Meeker, J. I., lateral-directional handling qualities of piloted re-entry vehicles, 12860
- Meet Americans at home, 10126
- Meeting challenge of later years, 8802
- Meetings, see Conferences, congresses, etc.
- Meetings that move, guide to successful meetings on civil defense, 14843, 16052, 17451
- Meeves, H.C., mineral industry of Wyoming, 2566
- Megonnell, William H., address, Aug. 26, 1966, 1580
- Mehr, Stanley, prune industry of France, 12565
- Mehren, George L. :
 - addresses—
 - Sept. 19, 1966, 30
 - July 10, 1967, 13210
 - Aug. 15, 1967, 15844
- Meinke, W. Wayne, trace characterization, chemical and physical, 12985
- Melrovitch, Leonard :
 - attitude stability of spinning passive orbiting satellite, 6709
 - dynamic characteristics of variable-mass slender elastic body under high accelerations, 5188
- Melroy, Jacob L., vestibular system and human dynamic space orientation, 1428
- Meister, David, evaluation of user reactions to prototype on-line information retrieval system, 17945
- Meltnar, Lise, presentation of Enrico Fermi award to (remarks), 134
- Melanotus, see Beetles.
- Melder, Keith, American parade of politics, 10078
- Melf, Leonard T., variations in gage constant as function of emission current in unshielded open-end grid Bayard-Alpert ionization gage, 6863
- Mellichar, Emanuel, bank financing of agriculture, 12530
- Mellin, Frank L., jr., relief, 13572, 17494
- Mellor, Malcolm, creep of snow and ice, 7380
- Melnick, Edward L., quantitative measures for analysis of fertility series, 7498
- Melnick, Frank, analysis of U.S. exports of scientific industrial and technical instruments, 1958-66, 15983
- Melochia, contribution from National Herbarium, 14532
- Melon flies, see Flies.
- Melons :
 - fresh market, acreage, production, etc., 1959-65 revised estimates, 14762
 - spring, acreage market guide, 4661
 - summer and fall, acreage marketing guide, 7828
- Melsa, James L., digital computer program for analysis and design of state variable feedback systems, 14397
- Melshelmer, E.S. :
 - outlet structure for Eau Galle reservoir, Eau Galle River, Wis., 10960
 - spillway, etc., Holt Lock and Dam, 4744
- Melting, ice, problem with natural convection, study, 17376
- Melton, C. E., exposure of men to intermittent photic stimulation under simulated IFR conditions, 5802
- Melton, Carlton E., jr., pilot vision considerations, effect on age on binocular fusion time, 4253
- Member banks, see Federal reserve member banks.

INDEX 1967

Membranes:

- built-up, thermal-shock resistance, 15584
- commercial potentials of semipermeable membranes, report, 6737
- desalination by reverse osmosis, study, 6448
- for use in desalination by reverse osmosis, permeability requirements, 15331
- inorganic ion-exchange, application to electrodialysis, 8214
- ion exchange, characteristics, USSR study, 9644
- model, ionic transport in biological systems, studies, 6443
- polymer structure and ionic transport of polystyrenesulfonate model, 9592
- reverse osmosis—
 - membranes containing graphitic oxide, 6444
 - new polymer systems, research and development, 8213
 - ultrathin, fabrication and evaluation, 12641
- transport of electrolytes through membrane systems, 15332

Memoirs of geography (Chinese periodical): translations, 1312

Memorandums, see names of departments, etc., issuing memorandums.

Memorial services:

- Baldwin, John F., 5967
- Fogarty, John E., 9030
- Herter, Christian A., 16152
- print as House document, report, 12242
- McNamara, Patrick V., 5968
- Thomas, Albert, 246

Memorials, see National monuments and memorials—also names of persons to whom memorials are erected.

Memory:

- effect of actinomycin 2703 on stabilization of conditioned reflexes and transition from short-term to long-term memory, 1338
- human—
 - during natural sleep, input and consolidation of information, USSR book excerpts, 15362
 - information input and fixation during natural sleep, USSR study, 11285
 - mechanism of conditioned reflexes and memory, USSR studies, 5014
 - mechanism of memory, USSR study, 8268
 - pitch, masked DL, 11348

Memory devices:

- circuits, bipolar current driver, 2627
- memory word line configuration allows high storage density, 6780
- MOFSET analog memory circuit achieves long duration signal storage, 6766
- non-destructive fluidic storage control device, research, 11409
- one-count memory circuit prevents machine mode interaction, 6697
- present and future state of the art in guidance computer memories, 18049

Memphis, Tenn.:

- area wage survey, 9746
- employment, administration of justice, and health services, civil rights report, 14851
- Mississippi River and tributaries in district, stages and discharges, 12476
- National Advisory Commission on Rural Poverty, hearings, 17126
- population, special censuses, 16021

Memphis State University:

- land transfer to—
 - hearing, 9326
 - law, 12174
- reports, 7709, 12365

Men:

- adult, body volume, 14780
- and milestones in American agriculture, 2039

Men—Continued

- bio-thermal responses to varied work programs in men kept thermally neutral by water cooled clothing, 8423
- laboratory profile of 283 healthy adult males, 7347
- potential supply and replacement of rural males of labor force age, 1721
- Mena, Cesar A., relief, 9205, 13490, 13593
- Menard County, Tex., soil survey report, 8701
- Mendel, J. M., applications of artificial intelligence techniques to spacecraft control problem, 12854
- Mendel, Joseph J., forestry accomplishments in southeastern Ohio under U.S. agricultural conservation program, 14135
- Mendell, J. S., search for plasma oscillations stimulated by pre-bunched electron beam, etc., 12870
- Mendelssohn, Rudolph C., BLS information system, search statement manual, 15436
- Mendez, Alfredo F., relief, 13620, 17500
- Mendoza, Jose A. G., relief, 270
- Menes, Gene P., pressures and forces on flare-stabilized bodies in air and in mixture of 85-percent CO₂ and 15-percent air, 17011
- Menis, Oscar, analytical coordination chemistry, titrimetry, gravimetry, etc., 14518
- Menominee Range, geology of iron-bearing district, Dickinson County, Mich., and Florence and Marinette Counties, Wis., 6398

Mental health:

- amendments of 1967—
 - hearings, 9163
 - law, 12173
 - reports, 9136, 10599, 12366
- benefits of social security amendments of 1965, 5447
- community mental health centers, bold new approach, 13070
- film announcement, 17138
- community programs, psychiatric facilities, trends in usage, 5465
- directory, 2828
- evaluation, bibliographic index, 5421
- facilities, publications, bibliography, 5459
- manpower utilization, 2829
- mental health digest (periodical), 15696
- mental health manpower, current statistical and activities report, 2829
- nursing, institutions offering trainee stipends for graduate and undergraduate education, 11760
- occupational mental health notes, 17154
- pediatric hospitals, planning for, workshop proceedings, summary, 17158
- personnel supported under National Institute of Mental Health training grants, current status, 2839
- program reports, 10054
- psychologists in mental health, 1964 survey, 5458
- religion and mental health, 1960-64, bibliography, 11719
- research grant awards—
 - 1948-63, listing by State, etc., 13083
 - Public Health Service, 1966 funds, 14630
- research grant program, 1965, descriptive data sourcebook, 15707
- selected films, guide, 14636
- State and territorial authorities, conference with Surgeon General, proceedings, 5457
- State planning, 1966 final reports, 17141
- State salary ranges, 4898, 11194
- statistics, current reports, 15697
- support programs of NIMH, 18174
- trainee stipends, available, etc., psychiatric nurses, 10058
- training grant awards, Public Health Service, 1966 funds, 14631
- training grant program, 1965, statistical sourcebook, 7076
- Mental health centers, see Mental institutions.

Mental illness, troubled employees, recognizing and supervising, guide, 14871

Mental institutions:

community mental health centers—

bold new approach, 13070

film announcement, 17138

construction act, extension, etc.—

hearings, 9163

law, 12173

reports, 9136, 10599, 12366

construction, laws compilation, 4547

consultation and education, 1567

essential services—

emergency services, 5429

inpatient services, 11727

outpatient services, 11728

partial hospitalization, 5430

patients, 1587, 5454-55, 17157

private—

mental hospitals and general hospitals

with psychiatric facilities, 5455

mentally retarded patients, 1587

psychiatric facilities usage for community

mental health programs and related research, 5465

public, mentally retarded patients, 5454,

17157

State and county mental hospitals—

patients, 11749

provisional patient movement and administrative data, 15697

see also Hospitals.

Mental retardation:

abstracts (periodical), 3550

amendments of 1967—

hearing, 17666

reports, 14971, 16246

basic introduction and overview of related

problems, 1134

campaign to combat, Nation's progress

and remaining great needs, report,

15665

casefinding, developmental approach,

10403

chance to help, story of SWEAT, 7060

conference, Hill-Burton and mental

retardation construction authorities with

Surgeon General, 1966 proceedings,

15692

facilities and community mental health

centers construction act of 1963, amend,

hearing, 17666

facilities, construction, laws, compilation,

4547

facilities, extend, etc., laws—

hearings, 10659, 17666

reports, 14971, 16246

Health, Education, and Welfare Department

activities, 6414

mental retardation report (periodical),

3551

publications, Health, Education, and Welfare

Department, 4896

Mental Retardation, President's Committee

on, see President's Committee on Mental

Retardation.

Mental tests:

cybernetic testing, 8864

geographic and astronomie distance re-

sponses by Air Force Officers, 4174

performance tests for operator-skills re-

search, 1821

psychomotor performance, predicting 4-

hour levels from initial half hour, MOI

study, 17355

Mentally handicapped, jobs and mentally

restored, memo to psychiatrists, 5051

Mentally ill:

antipsychotic drugs, uses in psychiatry,

etc., 2962

community care, annotated bibliography,

1590

mentally restored, interviewing guides for

specific disabilities, 10944

Mentally ill—Continued

services of community mental health centers—

consultation and education, 1567

emergency services, 5429

inpatient services, 11727

outpatient services, 11728

partial hospitalization, 5430

State and county mental hospitals, pa-

tients, 1749

VISTA serves mentally handicapped, 6168

Mentally retarded:

children—

clinical programs, listing, 5905

military medical benefits of 1966—

law, 365

report, 664

of deprivation, changing course of fa-

miliar retardation, 8966

community facilities, progress report,

14629

excerpts from comments to President's

Committee on Mental Retardation, 7048

facilities for, hospital and medical facili-

ties series, 14629

facilities, publications, bibliography, 5459

Federal employment, 1560

2d look, progress report, 16083

help for the mentally retarded, 13174

PCMR progress, 2793

private institution, patients, 1587

public institutions, patients, 5454, 17157

spouses and children, of active members of

Armed Forces, use of private facilities,

report, 14941

university facilities for diagnosis, treat-

ment, etc., construction, Public Health

Service, grants and awards, 11755

VISTA serves mentally handicapped, 6168

voluntary admission of patients to insti-

tution providing care, education, and

treatment, report, 7703

Menus, sample menus and food list for week

based on USDA, economy family food

plan, 10157

Menus for space flight:

bite-size feeding to man in oxygen-hellum

atmosphere, nutritional evaluation, etc.,

82-83

space flight feeding systems, characteris-

tics, concept for improvement, and public

health implications, 15898

Menzel, Horst F., parametric study of one

mgd brackish water reverse osmosis plant

(spiral module concept), 9590

Meramec River:

basin, engineer report—

departmental edition, 2213

document edition, 2009

Mercaptamines, pharmacology and clinical

use, USSR study, 8242

Merchandise, see Commercial products.

Merchandising, contractor operated messing,

new procedures adopted to improve man-

agement at Kwajalein Missile Test Site,

Defense Dept. GAO report, 14155

Merchant, J. H., preserving, disinfecting,

and sterilizing, classification definitions,

18119

Merchant, John, oculometer, 14376

Merchant marine:

act of 1920, amend—

hearing, 13851

report, 15107

act of 1936, amend—

hearing 7753, 16335

reports, 15009, 16278

American—

regulation and promotion (address),

2246

role of maritime industry in rehabilitat-

ing (remarks), 17907

cargo promotion program (remarks), 6627

changes in ownership, etc., of vessels,

monthly report, 3581

INDEX 1967

Merchant marine—Continued
 concern of Government in maritime mat-
 ters (address), 7971-72
 damn the torpedoes (remarks), 17908
 fleet, replacement problems, hearings, 2109
 graduation exercises at Academy (re-
 marks), 6826
 history, brief, 11344
 importer, and U.S. merchant marine, 12786
 legislation, hearings, 4552
 maritime matters—
 deployment of USS Cascade to Malta,
 agreement, 8745
 deployment of USS Shenandoah to
 Malta, agreement, 2904
 liability during private operation of
 N.S. Savannah, agreement with—
 China, Republic, 15799
 Greece, 11856
 visit of N.S. Savannah to Hong Kong,
 agreement, 15795
 maritime program, proposed, 1968, hear-
 ings, 12307
 maritime safety digest (periodical), ship-
 yards, 3542
 United States, significant industry (re-
 marks), 16579
see also Sailors—Shipping—Ships.
 Merchant Marine and Fisheries Committee,
 House:
 activities, 89th Congress, 2d session, 6040
 calendar, 3451
 committee prints, 4550-51, 6040
 hearings, 743-746, 4552, 7752-53, 9164,
 19663-665, 12307, 15045, 16335-337
 investigations and studies—
 authorization, report, 6013
 expenses, report, 7674
 reports, 624, 669, 671, 9108, 12250-251,
 12253-254, 12256, 12265-266, 15008-9,
 16234
 Merchant Marine Council, proceedings, 3773,
 12125
 Merchant Marine Veterans Association, in-
 corporation, provide, 7646
 Merchant seamen, *see* Sailors.
 Merchant ships, *see* Ships.
 Merchant vessels, *see* Shipbuilding—Ships.
 Mercury:
 condensing, flow in 0- and 1-G environ-
 ments, photographic study, 12939
 distribution—
 Cripple Creek district, Colo., 9571
 Ely mining district, White Pine County,
 Nev., 9564
 droplet parameters including effects of
 gravity, photographic study, 1509
 electron bombardment ion thruster—
 accelerator grid durability tests, 14462
 cathode durability tests, 12900
 oxide-cathode durability, 6867
 mineral industry survey, quarterly, 3552
 nonwetting, condensing flow—
 in horizontal, sodium-potassium-cooled
 tubes, heat-transfer, experimental in-
 vestigation, 11541
 in sodium-potassium-cooled, tapered
 tube, pressure characteristics, 1498
 thermodynamic properties of liquid metal
 solutions in sodium-mercury system,
 9910
 White Mountain deposits, Kiskokwim River
 basin, Alaska, investigations, 6677
 Mercury (planet):
 manned and unmanned missions to, mi-
 nimal energy ballistic trajectories, 9836
 Mercury Project, *see* Project Mercury (man-
 in-space program).
 Mercury vapor, detector for geochemical
 prospecting, 9568
 Mergers, *see* Business consolidations.
 Merit systems, State and local systems, ex-
 tend to additional programs financed by
 Federal funds, hearings, 12409
 Merited grade versus merited pay rankings
 of alrman jobs, 7339

Merriam, Ida C., social security benefits and
 poverty, 7132
 Merrill, Carl C., electrorefining yttrium,
 15482
 Merrill, Robert H., three-component bore-
 hole deformation gage for determining
 stress in rock, 15481
 Merrimac River:
 basin, engineer report—
 departmental edition, 4734
 document edition, 4569
 Merritt, James H.:
 inhibition of aromatic L-amino acid de-
 carboxylase by decaborane, 14775
 reversal of decaborane-mediated norepine-
 phrine depletion by methylene blue, 1730
 Mertens, Henry W., homogeneous field for
 light adaptation, 4255
 Mertens, Ruth A., adaptation to vestibular
 disorientation, responses to angular ac-
 celeration, etc., 10322
 Merz, John E., store location, bibliography,
 1800
 Mesa, Ariz., population, special census, 10369
 Mesa Verde National Park, general infor-
 mation, 5317
 Mesavage, Clement, random integer dispen-
 ser, 14116
 Mesometeorological research & development
 prospectus, 9433
 Mesons, stopping power and range tables,
 5192
 Mesosphere, temperature, pressure, density,
 and wind measurements, 17012
 Mesozoic era, pelecypods Otapiria Marwick
 and Luperella Implay in U.S., 8175
 Message from President's Committee on Men-
 tal Retardation, 1560, 5407, 7047-48
 Message retrieval systems, *see* Information
 storage and retrieval systems.
 Messengers, examination announcement, 8995
 Messier, Robert L., variable turbine ge-
 ometry for small gas turbine engines, 11996
 Messes:
 ashore, Navy manual, 9977
 contractor operated messing, new proce-
 dures adopted to improve management
 at Kwajalein Missile Test Site, Defense
 Dept., GAO report, 14155
 Messier, AIC 79 B, lunar chart, 7333
 Mestas, Jorge, relief, 13747
 Metabolic rate and longevity of *Drosophila*,
 9923, 9925
 Metabolism:
 acute starvation body composition changes,
 7412
 acute starvation in normal humans—
 performance and cardiovascular evalua-
 tion function, 121
 ten days, effects, 122
 bio-thermal responses to varied work pro-
 grams in men kept thermally neutral by
 water cooled clothing, 8423
 effects of prolonged bed rest, their modifi-
 cation by simulated altitude, 14777
 energy, of rats born and raised in low-
 pressure pure oxygen environment, 5709
 human body, disturbances, role of magne-
 sium, USSR current concepts, 2446
 metabolic patterns in 7-10-year-old girls
 in selected Southern States, basic data,
 13227
 microelement, in myopathy patients, USSR
 study, 2447
 nitrogen in brain of rats under impulse
 accelerations, USSR study, 1167
 nucleic acids, phosphoproteins and phos-
 pholipids of liver in experimental athero-
 sclerosis, USSR study, 1275
 seasonal changes among endocrine-metabo-
 lic indices of men residing in subtropical
 climate, 7353
 Metal boot permits fabrication of hermeti-
 cally sealed splices in metal sheathed in-
 strumentation cables, 6700
 Metal containers, *see* Containers.

Metal cutting:
explosive cutting in simulated space environments, 8466
tool industry 1961-66, shipments, 15984
tools, current industrial reports, 12075

Metal forming:
high-energy-rate magnetohydraulic metal forming system, 11463
hot-drape forming of large torus sections, development of technology, 17963

Metal halides, vapor pressure, $\text{SnCl}_2\text{-ZnCl}_2$ binary system, 16864

Metal mines and mining:
Federal metal and nonmetallic mine safety act, report, 647
geometry of metal distribution in 5 veins of Fresnillo mine, Zacatecas, Mexico, 9771

Metal oxides, infrared spectra, 2723

Metal plating, see Plating.

Metal shapes, see Shapes (metal).

Metal sheeting, see Sheet metal.

Metal tube can be folded for compact storage, is self-erecting, 1452

Metallic films:
deposition of thin films by ion plating on surfaces having various configurations, 1510
thin films, 2d colloquium on, June 27-July 2, 1967, Budapest, Hungary, 12740

Metallographic holding fixture permits polishing of soft metals on vibratory lapping machine, 5155

Metallography, see names of metals.

Metallurgical engineers, Soviet, memoirs, 9666

Metallurgists, examination announcement, 4388

Metallurgy:
Communist Chinese abstracts, 3122
East European scientific abstracts, 3223
fundamental and applied research and development, 6907
Hawaiian ferruginous bauxites, metallurgical testing, report, 11374
metallurgical characteristics of high strength structural materials, 5363, 10014
metallurgical variables as possible factors controlling radiation sensitivity of structural steels, initial evaluations, 5357

Mines Bureau, Albany Metallurgy Research Center, quarterly progress reports, 1807, 5795

patent classification definitions, 8604

powder, hydrostatic, porous mandrels provide uniform deformation, 12916

USSR industrial development, translations, 4020

USSR scientific abstracts, 4030

zinc, iron contaminated, refining by filtration and centrifugation, 5125

Metals:
analysis procedures, 9985
composites of porous metal and solid lubricants increase bearing life, 6742
composition determined by thermoelectric metal comparator, 8387
consumption and stocks at brass and wire mills, mineral industry survey, monthly, 3062
copper mosses as indicators of metal concentrations, 4886
corrosion in tropical environments, 9993
critical phenomena in ferro- and antiferromagnets, 1521
density measurement in extreme environments, radiation counting technique, 17922
dissimilar, reliable diffusion bonding ensured by silver plating, 11461
domestic reserves and potential sources, evaluation, 8340
equilibrium carbonate-bicarbonate research, USSR study, 1250

Metals—Continued
fatigue zones identified by polarized light photography, 9846
filtered and unfiltered molten, sampling techniques, 9795
founding, classification definitions, 11684
friction properties in single-crystal and polycrystalline form, effect of recrystallization, 15574
galvanomagnetic effects, exact semiclassical theory, 15581
glowing metals, theory of surface ionization, 11568
heat-treatment of metal parts facilitated by sand embedment, 6779
high temperature coating, USSR study, 9677

industries—
employment and injuries, minerals yearbook chapter, 8338
review, minerals yearbook chapter, 6689
technologic trends, minerals yearbook chapter, 5136

infrared reflectances at cryogenic temperatures, etc., 6922

intergranular metal phase increases thermal shock resistance of ceramic coating, 6811

joining, NASA contributions, 6738

liquid—
AEC-NASA information meeting, 125
heat exchanger, thermal conductivity of layer adjacent to wall, USSR study, 11249
turbulent heat transfer in channels with heat sources in fluid, theoretical investigation, 1499

liquid-metal flow, heat-transfer analysis in rectangular channels with heat sources in fluid, 6883

liquid-metal quality measurement techniques, analysis, 12951

metal cutting tool industry, 1961-66, shipments, 15984

metal fabricating technology, compilation, 11429

metal parts and components, nondestructive testing, handbooks describing eddy current techniques used, announcement, 17955

metal treatment processes, USSR study, 12746

metallic materials and elements for aerospace vehicle structures, military handbook, 7860

change, 9370

metallic mineral industries, injury experience, 11355

metals and metal products, trade and tariff information, summaries, 18237

micrometeorite craters in substrates, observation utilizing electron micrographic replica methods, 9815

minerals yearbook, 1965—
departmental edition, 9761
document edition, 9049

mining, census of mineral industries, 1963 industry statistics, 8034

new metals and metal-ceramic composites, 5194

noble, in hydrocarbon synthesis, 12827

nonferrous metals, identification symbols, Communist China, 6547

oxide film on metal substrate reduced to form metal-oxide-metal layer structure, 12841

refractory—
cold drawing, copper-acrylic enamel serves as lubricant, 5140
electrodeposition of thick coatings of platinum and palladium from aqueous electrolytes, 16861
welding, bonding, and sealing by vapor deposition, 14432

refractory-metal matrices, fiberling of oxides, 9900

INDEX 1967

Metals—Continued
 scrap, temporary suspension of duties continue—
 law, 12180
 reports, 7730, 13801
 soft, polishing on vibratory lapping machine with metallographic holding machine, 5155
 solubility in liquid zinc, data compiled, 12844
 trace levels of metallic corrosion determined by emission spectrography, 6850
see also Strategic materials—*also* names of articles manufactured from metal—*also* names of metals.

Metalwork:
 cooling-lubricating fluids, Hungarian research results in developments, 14232
 high-velocity metalworking, survey, 11428
 selected metalworking operations, 1963
 census of manufactures, 1278

Metalworking machinery:
 current industrial reports, 3170
 Federal item identification guides for supply cataloging, supplements, 3286
 USSR industrial development, translations, 4021

Metamorphic rocks, *see* Rocks.

Metastable state:
 atomic hydrogen, comparison of Gryzinski and Born cross sections, 9874
 two-phase flow, study, 6449

Metcalfe, Z. P., general catalogue of Homoptera, 12

Metcalfe, County, Ky., soil survey report, 7135

Meteorites, Allegan, Bur-Gheluai and Cynthia, composition, 18089

Meteoroids, *see* Meteors.

Meteorological satellites, *see* Satellites.

Meteorological technicians, examination announcement, 13445

Meteorologists:
 examination announcement, 4387
 in service of industry, Hungarian study, 12717

Meteorologiya i gidrologiya (periodical):
 translations, 1278, 1339, 6520, 6564, 9642

Meteorology:
 agricultural meteorology, USSR studies, 4957
 air pollution study, 11739
 American Meteorological Society abstracts, 3636
 Army aviation applicable, technical manual, change, 7390
 aviation, problems, USSR studies, 1335
 balance equation, use in tropics, 9429
 data inputs, synthesis of 15u infrared horizon radiance profiles, 9801
 data report, meteorological rocket network firings (periodical), 1032, 3190
 Federal plan for meteorological services and supporting research, 9431
 horizon radiance profile variations over range of meteorological, geographical, and seasonal conditions, 8418
 Hungarian Meteorological Society, 39th plenary session, 14220
 in Socialist countries, Hungary, translations, 15417
 Mars and Venus, summary of available knowledge, 11410
 measurements, new methods, USSR studies, 11272
 mesometeorological research & development prospectus, 9433
 meteorological data—
 collection and interpretation, USSR study, 12736
 tropical Atlantic Ocean, Equalant III, 8569
 meteorological factors, effects on agriculture, USSR studies, 4938
 meteorological research with rockets, agreement with Canada, 5548

Meteorology—Continued
 meteorological services of socialist countries of Europe, conference of directors, 1179
 meteorological servicing of railroad transportation, USSR, 1182
 Northern Hemisphere, Mar. 1964–Feb. 1965, derivation of data, 8417
 radar in meteorology, USSR study, 8260
 records documentation, 6227–28, 13990, 16536
 satellites—
 ESSA 3 television cloud photography catalog, 16536
 Project EOLE research, agreement with France, 2906
 Soviet scientists, papers, 4986
 TIROS IX television cloud photography, catalog, 6227
 TIROS X television cloud photography, catalog, 13990
 surface observations manual, 5592
 synoptics—
 USSR studies, 12692
 weekly analyses, 5-, 2-, and 0.4-MB, surfaces for 1964, data from Meteorological Rocket Network, 10968
 TIROS VII radiation data synoptic world weather analysis, 12922
 tropospheric radio duct meteorology at VHF and UHF in theory and as observed on trip around world, 1551

USSR—
 literature for 1965, list, 1174
 studies, 6564
see also Hydrometeorology.

Meteorology and hydrology (USSR periodical):
 translations, 1278, 1339, 6520, 6564, 8270, 9642, 12693, 12695, 15369, 16754, 16757

Meteors:
 artificial—
 spectrograms, photometry, 9902
 study as ablaters, 8480
 atmospheric trajectories of 413 precisely reduced photographic meteors, analysis, 18204
 ballistic limit of double-walled meteoroid bumper systems, 9893
 ionization probability of iron particles at meteoric velocities, 11406
 luminous efficiency, laboratory measurement, 11411
 meteoroid damage to filamentary structures, 16899
 meteoroid environment, near-earth, 1512
 meteoroid hazard, impact effects, analytical study, 12855
 polyethylene terephthalate capacitor-type meteoroid detector, effects of electron irradiation, 1491
 trajectories and processes, automatic-reduction procedure for photographic data, 15510

Meters, *see* names and types of meters, or substance, etc., measured.

Methacrylates, poly (methyl methacrylate), photodegradation in solution, 5358

Methanes:
 coal dust and methane mixtures, equivalences and lower ignition limits, 9782
 high purity, calculation of heating value for use as reference material, 2743
 incandescence of hot gases to methane and coal dust, reduction by sodium chloride and sodium nitrate, 11383

Methanol, stress-corrosion cracking of Ti-6Al-4V alloy in methanol, 6900

Methemoglobin, production in vitro and in vivo, effect of monomethylhydrazine, 14773

Methionine-pyrodoxine and air-sickness, 77

Method for predicting frictional loss in metal bellows and flexible hose, 9825D

Method of observing and interpreting results of studying fields of radio broadcasting stations, 9625

Methodological reports, 1900-66, annotated bibliography, 10382
 Methodology, *see* subjects.
 Methods engineering, problems of science of production engineering, USSR study, 2432
 Methods for performance-testing of electromechanical pressure transducers, 6923
 Methyl bromides:
 description, etc., technical reference, 9741
 wheat fumigation, gravity-penetration, single-pass, and closed-recirculation methods, 15361
 Methyl methacrylate, *see* Methacrylates.
 Methylamine, 1,4 cyclohexanebis (methylamine), regenerative carbon dioxide absorbent, 8589
 Methylene blue, reversal of decaborane-mediated norepinephrine depletion in tissue, 1730
 Methylsiloxane, *see* Siloxanes.
 Metric system:
 ASTM metric practice guide, 6915
 micrometer measures of 256 double stars, 11628
 micrometer measures of 1164 double stars, 15623
 practicability of increasing use in United States, Secretary of Commerce to conduct investigation, report, 7608
 units of weight and measure, definitions and tables of equivalents, 9941
 Metropolitan areas, *see* Cities and towns.
 Metropolitan Water District of Southern California:
 nuclear power desalting project, authorize—
 hearings, 7749, 7813
 laws, 375, 10487
 reports, 675, 6078, 7731, 9125
 Metzler, William H., farm labor situation in selected States, 7882
 Mexican-Americans, selected references, 8282
 Mexico:
 aerial dispersal of pink bollworm, 5678
 background notes, 1617
 caddis flies, 11611
 Chamizal boundary, construct border highway—
 law, 499
 reports, 630, 701, 904
 Colorado River boundary waters, loan, agreement, 2914
 east coast, sailing directions, change, 9969
 economic and social development of border area, joint commission to study, agreement, 7191
 economic basic data, 14882
 education, joint commission for review of operation of certain scholarship funds, agreement, 7175
 fruits, fumigating with ethylene dibromide, manual, 13203
 geodetic satellite observation station, agreement, 11859
 health information for travel, 13080
 livestock and meat industry, 8048
 mineral industry, minerals yearbook chapter, 12804
 plant regulatory officials, 5618
 radio broadcasting, agreement, 11852
 trade in cotton textiles, agreement, 15777
 travel to United States, market, survey, 5581
 west coast, sailing directions, 6998, 15625
 Mexico, Gulf of:
 adjacent to Tampa Bay, oceanographic atlas, 12545
 coast pilot, 17467
 supplement, 7553
 Intraoceanic Waterway, Gulf section, New Orleans, La. to Port Arthur, Tex., etc., navigation maps, 8383
 surface water quality of basins, 8184, 17834

Mexico-United States Interparliamentary Group:
 7th conference, House delegation report, 13704
 7th meeting, Senate delegation report, 12408
 Meyer, Hans J., results of ultrasonic testing in practice of machine and boiler construction, etc., 13339
 Meyer, R. A., status of development of dispersed fuel particles in berillium oxide matrix, 7421
 Meyers, Gilbert L., testimony, hearings, 16394
 MHB series, 15697
 Mi Soon Oh, *see* Oh, Mi Soon.
 MIADS 2, *see* Map Information Assembly and Display System.
 Miami, Fla.:
 area wage survey, 8310
 port, dedication (remarks), 6259
 Mica, *see* Muscovite.
 Mice:
 acute hydrazine toxicity, toxicologic studies, 4183
 oxygen uptake, effect of different inert gases and low pressure normoxic environments, 76
 Michael, Donald N., cybernation and social change, 6596
 Michaelson, G. S., bacteriology of clean rooms, 17937
 Michalowska, Sophie, relief, 16174
 Michalski, Bernadette, mineral industry of Poland, 2563
 Michaux, C. M.:
 handbook of physical properties of—
 Planet Jupiter, 11424
 Planet Mars, 15516
 Michigan:
 apple-packing costs, analysis, 5653
 area measurement reports, 13559
 census of agriculture, 1964, State and county statistics, 10390
 census of manufactures, 1963, area statistics, 158
 census of mineral industries, 1963, area statistics, 4289
 climate, 16530
 climatological data, 3096
 county business patterns, 1865, 12050
 electric rate book, 16583
 hardware face veneer and plywood—
 distribution and end-uses, 8074
 mill closures, 2308
 iron formations, samples and metallurgical evaluation, 6678
 landings—
 fish, annual summary, 11073
 fishery products, 3553
 Marquette Iron Range—
 fine-grained hematite ores flotation procedures, laboratory, etc., development, 14355
 water resources of area, 14183
 mineral industry, minerals yearbook chapter, 5117
 postal map, 15658
 precipitation data, hourly, 3401
 southeastern river basins, water resources study, information bulletin, 7929
 women in upper Peninsula economy, conference, 2677
 Michigan, Lake:
 pollution of interstate waters, progress evaluation meeting, 14053
 small craft, gale and whole gale warning facilities chart, 14724
 southwestern, water pollution, control, etc., hearing, 738
 water pollution control, comprehensive plan for basin—
 Green Bay area, Mich. and Wis., 14050
 Milwaukee area, Wis., 14051
 Mickey, W. V.:
 earth vibrations from nuclear explosion in salt dome, 8911

Mickey, W. V.—Continued
seismic wave propagation, 12118
strong-motion and surface accelerations, 5782

Microanalysis, *see* Chemical analyses—Electron probe microanalysis.

Microbalance, crystal, measures condensable molecular fluxes, 6744

Microbes, *see* Micro-organisms.

Microbiologists:
examination announcement, 14856
discontinuance notice, 16077
FDA microbiologist, career information, 11096

Microbiology:
Clostridium toxins and bacterial aerosols, microbiological studies, 11290
examination of space hardware, NASA standard procedures, 15521
primary microbiological succession on landslide of Alpine origin at Mount Rainier, 11119

Microcontaminants, *see* Contaminants.

Microcurrent generator produces electrical currents accurately between 10⁻¹¹ ampere to 10⁻³ ampere, 8401

Microelectronics, *see* Electronics.

Microelement metabolism in myopathy patients, USSR study, 2447

Microfilms:
National Archives publications—
list, supplement, 17030
pamphlet accompanying, 18060-72
newspapers, list, 5329
publications of National Historical Publications Commission, catalog, 6936

Microflora, *see* Bacteria and bacteriology—Intestinal flora—Skin flora.

Microforms, masters, national register, 2530

Micrographs, *see* Electron micrographs.

Micrography of tubular-type battery plates, 8591

Microlepidoptera:
nearctic Gelechioidea, Lita group (Lepidoptera: Gelechioidea), revision, 6949
neotropical—
Chilean, description by Emilio Blanchard, 6970
genus *Lethata* (Lepidoptera-Stenomitidae), studies, 8549
review of genus—
Loxotoma, 6969
Thioscelis, 14543
revision of genus—
Idolatteria (Lepidoptera, Tortricidae), 8538
Pseudatteria (Lepidoptera: Tortricidae), 6944
systematic position of 2 taxa erroneously placed in family Stenomitidae (Lepidoptera), 6304

Micromanipulation tool is easily adapted to many uses, 8446

Micromanipulators, liquid micurgy chamber and microsyringe designs allow more efficiency, 18882

Micrometeoroids, craters in metal substrates, observation utilizing electron micrographic replica methods, 9815

Micrometers:
automated microsyringe, accurate and reliable device, 14415
measures of 236 double stars, 11623
measures of 1164 double stars, 15623
sonomicrometer, simple portable, 1741

Microminiaturization, *see* Miniaturization.

Micronesia, *see* Trust Territory of Pacific Islands.

Micro-organisms:
automatic analysis of microscopic objects, problems, working conference in Pushchino-on-the-Oka, 1219
enteric microbial flora of man in oxygen-hellum atmosphere, 79
in 2 types of air masses at 690 meters over a city, 66

microbial flora surviving irradiation pasteurization of seafoods, effect, 1800

Micro-organisms—Continued
microbial inhibition systems employing radiation (MISER), 8908
microbially controlled environment, NASA standards for clean rooms and work stations, 15522
micropopulation, relationship to altitude, 1733
of land air mass as it traverses ocean, 68 of upper atmosphere, 66-68, 1732-33
relationship between frontal activity and micropopulation at altitude, 1732
soil, simple, time-saving techniques for studies, 16656

Microparticle and fiber reinforcement of epoxy resins, 5352

Microphones, device enables calibration at high sound pressure levels, 16966

Microscopes, interference microscope, USSR studies on microlocalization of potassium in myofibrils, 14217
see also Electron microscopes.

Microscopy:
anoptical, use for study of morphology of brain tumor cells, USSR study, 12739
fluorescence and phase-contrast, for differential cytological diagnosis of precancer and cancer of cervix uteri, USSR study, 12700
microscopic studies of tumor viruses and cell structure, USSR, 6562
observations of ultraviolet irradiated and weathered softwood surfaces and clear coatings, 14123
see also Electron microscopy—Slides (glass).

Microvoids in glass-filament-wound structures, their measurement, minimization, and correlation with interlaminar shear strength, 11677

Microwave communication systems, optical and microwave communications, a comparison, 11529

Microwave spectroscopy, *see* Spectroscopy.

Microwaves:
attenuation, measurements and standards, 8523
errata sheet, 14515
azimuth measurements, atmospheric errors, experimental study, 2224
liquid hydrogen densitometer utilizes open-ended microwave cavity, 11452
microwave and high-frequency bibliography, 17031
millimeter wave diode for efficient harmonic power generation, 11483
mixer has high conversion efficiency, 6787
monitoring of sea water contamination of Navy fuel oils, 15637
open-ended circular cylindrical cavities, errata, 11485

Middle Atlantic States, *see* Atlantic States.

Middle East, *see* East (Middle East).

Middle Ordovician period, *see* Ordovician period.

Middleton, John T.:
addresses—
Feb. 28, 1967, 8640
May 25, 1967, 13072

Midland, Tex.:
area wage survey, 15441
brackish well water reverse osmosis tests, 11217
District Court, western district, new Midland-Odessa division, create, report, 16235

Midstate division, *see* Missouri River Basin project.

Midway Islands, birds and aircraft, 1959-63 investigations, 4809

Midwest (U.S.):
cost of transporting freight by class 1 and 2 motor common carriers, 11233

Midwest
dairy
1644
fresh
wes
etc.
milk
in s
Miesch.
error
metho
geo
Migrant
agricu
281
family
guid
proble
study
travel
for
787
VIST
vocat
g
hea
law
rep
6 st
Migrati
beet l
betwe
pop
see al
Migrati
Comm
Comm
Migrato
fees, I
hea
beet l
infor
Migrato
Wate
Migrato
Milan, I
Milan C
Military
cata
certa
I
law
rep
offici
perm
law
rep
Military
Military
gener
Military
agree
Be
Inc
Ja
Lu
No
collec
77
forel
an
he
Ra
rep
forel
ma
12
Lathi
rev
milit
lav
milit
he

Midwest (U.S.)—Continued
 dairy farms, commercial, costs and returns, 16488
 fresh fruit and vegetable unloads in midwestern cities, by commodities, States, etc., 7832
 milk consumption and food service patterns in selected institutions, 11935
Miesch, A. T.:
 error in geochemical data, 8176
 methods of computation for estimating geochemical abundance, 9573
Migrant labor:
 agricultural, counties having 100 or more, 2811
 family housing for agricultural workers, guide, 11924
 problem in U.S., report, 7784
 study, authorization, report, 6080
 traveler/el viajero, quarterly newsletter for migrant and seasonal farm workers, 7879
 VISTA serves migrant worker, 6168
 vocational rehabilitation services, grants—
 hearings, 15172, 17600
 law, 16144
 reports, 14972, 16366
 6 steps forward, 17186
Migration:
 beet leafhopper in western U.S., 5686
 between State economic areas, census of population, 1960, 13402
 see also Immigration and emigration.
Migration, European, Intergovernmental Committee for, see Intergovernmental Committee for European Migration.
Migratory bird-hunting stamps:
 fees, increase—
 hearing, 10665
 reports, 624, 12266
 information for collectors, 11075
Migratory birds, see Game and game birds—Water birds.
Migratory workers, see Migrant labor.
Milan, Italy, U.S. trade center, 12654
Milan Compress Co., relief, 328, 563, 839
Military Academy, West Point:
 catalogue, 1967-68, 17910
 certain civilian instructors, etc., provide public quarters and utilities without charge—
 law, 430
 report, 933
 official register, 11350
 permitting persons from countries friendly to U.S. to receive instruction—
 law, 506
 report, 692
Military affairs, 4211
Military Affiliate Radio Station (MARS):
 general information, 7859
Military aid:
 agreement with—
 Belgium, 13148
 Indonesia, 13154
 Japan, 15778
 Luxembourg, 11871
 Norway, 2927
 collective defense treaties, compilation, 7743
 foreign assistance act of 1967—
 analysis, 10653
 hearings, 9157, 10649, 12299, 13861, 15027
 Ramseyer rule print, 10652
 reports, 13837, 14960, 14073
 foreign assistance act of 1968, background material, fiscal year 1968, compilation, 12297
 Latin America, United States operations, review, 7770
 military assistance appropriations, 1967, law, 405
 military assistance appropriations, 1968, hearings, 15014

Military aid—Continued
 military assistance facts, 16464
 military assistance program addresses, MILSTRIP, 4679, 6152, 9379, 10900, 12445, 13926, 16472
 Thailand, procurement of locomotives under military assistance program, Defense Department, GAO report, 6380
 United States investment of military assistance funds in military installations located in France, 9158
Military aircraft, see Aircraft.
Military Airlift Command:
 contracts with, procedure for exemption under renegotiation act of 1961, as amended, 11777
 MAC flyer (periodical), 3531
Military Appeals, Court, see Court of Military Appeals.
Military art and science:
 advanced naval base defense, 6625
 automation of troop control, methodological problems, USSR, 8273
 classification, Library of Congress, 2528
 counter guerrilla operations, Army field manual, 8881
 defense traffic management handbook, change, 6142
 environmental test methods, military standard, 16469
 helicopterborne operations, Marine Corps manual, 15460
 infrared technology, handbook, 8584
 international logistics management, Army field manual, 1762
 logistics—
 material development, Army field manual, 1761
 selective management of secondary items, change, Army field manual, 10263
Marine Corps, command and staff action, manual, 2533
 mathematical methods in military affairs, application, USSR book excerpts, 15359
 methodological problems of military theory and practice, USSR study, 12701
 river-crossing operations, Army field manual, 4208
 riverine operations, doctrine, Marine manual, 8331
 scientific and philosophical application of cybernetics in military science, USSR study, 1197
 siewas of war, Army logistics, 1775-1953, 1397
 Soviet translations, 3887
 supply operations manual, defense depot transportation and supply procedures, change, 6145
 symbols, field manual, 10261
 tactical decision-making skills, generalized, research, 9982
 U.S.A. vs. U.S.S.R., changing strategic military balance, 12288
Military assistance, see Military aid.
Military assistance to civil authorities, 7383
Military bases:
 Philippines—
 agreement, 2916
 relinquishment of certain land areas in Camp John Hay, agreement, 11843
 Redcliff, Newfoundland, continuing use of adjacent land, agreement with Canada, 7155
Military camps, see names of camps.
Military ceremonies, honors, and salutes:
 Air Force manual, 8851
 Army field manual, 5728
Military claims, see Claims.
Military communications:
 DCS equipments/systems performance standardization program, DCA circular, 9360

INDEX 1967

- Military communications—Continued
 - defense communications system, engineering-installation standards manuals, 4668, 16455
 - field radio relay techniques, manual, 5729
 - signal construction battalion, field manual, 4205
 - signal large headquarters, operation company, field manual, 15937
- Military construction, *see* Installations (military).
- Military depots:
 - defense depot transportation and supply procedures, manual, change, 6145
 - maintenance manual for Army model CH-34 helicopters, 7401
- Military drill:
 - Air Force manual, 8851
 - field manual, 5728
- Military education:
 - audio-visual support center operations, field manual, 4206
 - military schools adopt programmed teaching methods, USSR, 18756
 - National Guard, Army, field training, administrative instructions, 8531
- Military equipment, *see* Military supplies.
- Military establishments, *see* Armed Forces—Defense Department.
- Military facilities, Army National Guard program, operating procedures, 6935
- Military fields, United States, instrument approach procedure charts, dates of latest editions, 3555
- Military handbooks, 980, 7860, 9370-71
- Military history:
 - Marine Corps—
 - historical bibliographies series, 14310
 - historical reference pamphlets, 8332, 12784, 14311, 17904-906
 - USSR memoirs, 6514
- Military History, Office of Chief of, Army, publications, list, 5095
- Military housing, *see* Housing.
- Military impact on American economy, now and after Vietnam, 12187
- Military index:
 - Defense Department, specifications and standards, 13920, 15188
 - supplements, 3412
- Military information:
 - catalog of current information materials, 7374
 - Eastern Europe, translations, 3556
 - route reconnaissance and classification, field manual, 1757
- Military installations, *see* Installations (military).
- Military intelligence:
 - activities, planning and execution, Fleet Marine Force manual, 12781
 - PACAF basic bibliographies, supplement, 7338
 - technical intelligence, Army field manual, 102
- Military justice, *see* Military law.
- Military law:
 - American civilians in Vietnam, application of Uniform Code of Military Justice, 16334
 - military affairs, pamphlet, 4211
 - military justice in Armed services, administration, hearings, 958
 - review, Army Dept. pamphlet, 3557
 - Uniform Code of Military Justice, amend, hearing, 16310
 - United States Code, amend titles 10 and 37, codifying recent laws, etc., law, 432
- Military Manpower Procurement, Civilian Advisory Panel on, *see* Civilian Advisory Panel on Military Manpower Procurement.
- Military operations, *see* Military art and science.
- Military Order of Purple Heart, legislative program, hearings, 9172
- Military pay, *see* Pay, allowances, etc.
- Military personnel, *see* Armed Forces—Army.
- Military pilot training, requirements, and inventories, hearings, 13843
- Military policy, worldwide military commitments, hearings, 944, 10816
- Military posture, hearings, 9149
- Military prisoners, confinement, field manual, 4207
 - see also* Prisoners of war.
- Military publications:
 - administrative guidance for Army National Guard, 11596
 - index of AMC publications and blank forms, 95, 5721, 10251, 13289, 15927
- Military records:
 - correction, remove time limitations and provide time limitations as to payments, report, 2016
 - service records, microcopy, pamphlet to accompany—
 - War of 1812 volunteers from Mississippi Territory, 18070
 - Union Army volunteers from Utah Territory, 18073
- Military research:
 - Army research and development—
 - newsmagazine, 3043
 - personnel, motivational work factors, 4228
 - long-range forecasting and planning, Air Force research program, 17340
 - research in progress, Army Research Office, Durham, 11993
 - skills, generalized, related to tactical decision making, 982
- Military review (periodical), 3558
- Military roentgenology, 10279
- Military schools, *see* Military education.
- Military science, *see* Military art and science.
- Military Sea Transportation Service:
 - sealift magazine, 3854
 - training plan for Naval Reserve officers, qualifications and professional development, 5341
- Military security:
 - espionage and internal security laws, 6934
 - security and foreign relations, regulations, Engineers Corps, 6206
- Military service:
 - after college, opportunity in Coast Guard Officer Candidate School, 217
 - chargeable accessions, profiles, 10296
 - universal military training and service act—
 - amend and extend
 - hearings, 9394, 10638
 - law, 13527
 - reports, 10608, 10744, 12246, 12255
 - youths, results of examination, health of Army, supplement, 8900
- Military services, *see* Armed Forces.
- Military standards, 2154, 3559, 4678, 6151, 7861-62, 9372-78, 10899, 12443-444, 13921-924, 15189-198, 16465-471, 17700
- Military supplies:
 - Air Force—
 - materiel, validity and controls over large volume of unfilled orders, GAO review, 17813
 - procurement instruction, revisions, 3009
 - air transport of supplies and equipment, external-transport procedures, Army technical manual, 8894
 - airdrop of supplies and equipment, Army technical manual—
 - general, types and methods of airdrop, etc., change, 4217
 - rigging—
 - Air Force communications control vehicles, 1771, 7398
 - ammunition for low and high velocity airdrop, 7399, 13303
 - carzo trailers, 8888, 15949
 - CW-BW water pretreatment decontamination set, 10280

Military supplies—Continued
 airdrop of supplies and equipment.
 technical manual—continued
 rigging—continued
 howitzers, 105-mm, 15950
 POL and rations, 8889
 trailer-mounted air compressors, 113,
 15951
 typical supply loads, 112, 8887
 weapon carrier, $\frac{1}{2}$ ton, 10281
 weapons systems, M 28 and M 29,
 change, 15952
 Armed services procurement regulations,
 3040
 supplements, 6139, 7846, 16456
 Army procurement procedure, changes,
 1753, 10254
 cataloging system, standardization, etc.,
 seminannual reports, 6032, 7739, 16313
 contractors guide, 8880
 DCS equipments/systems performance
 standardization program, 9360
 Defense Dept.—
 specifications and standards, index,
 13920, 15188
 supplement, 3412
 standardization documents, supply clas-
 sification listings, 3324, 13919
 defense disposal manual, changes, 6146,
 7853-54, 9368, 10890
 defense equipment and materiel, disposi-
 tion, agreement with Brazil, 11854
 defense procurement circular, 3194
 defense supply procurement regulation, re-
 vision, 3196
 disposal of U.S. supplies in France, report,
 7769
 DSA responsibilities, 7858
 equipment, marking and packing, AMC
 pamphlet, 4192
 evaluation of contractor's inspection sys-
 tem, 6154
 Federal manual for supply cataloging for-
 mat, content, and preparation of Federal
 supply catalog publications, 12439
 item identification, cataloging manual,
 16458
MILSTRIP—
 military standard requisitioning and is-
 sue procedures—
 changes, 6153, 15199
 supplements, 4679, 6152, 9379, 10900,
 12445, 13926, 16472
 military supply and transportation
 evaluation procedures, 13925
 Pacific basin market for wood products for
 military support activities, 1098
 parts and equipment, procedures for pack-
 aging and packing, military standard,
 16463
 procurement—
 legal service, Army pamphlets, 5737,
 7389, 8883-84, 13300, 14799-800
 small business subcontracting and set-
 aside programs, report, 4510
 specifications and standards for petro-
 leum and related products, reference,
 11st, 10903
 research and development of materiel,
 maintainability engineering, 103
 standardization policies, procedures, and
 instructions, manual, 3893
 supply operations—
 defense depot transportation and supply
 procedures, change, 6145
 manual, distribution system procedures,
 changes, 978, 12440
 United States, disposal in France, report,
 6109
 utilization manual, 4676
 change, 2148
see also Handling equipment.

**Military Traffic Management and Terminal
 Service:**
 defense transportation, monograph, In-
 dustrial College of Armed Forces, 16731
 transportation proceedings (periodical),
 7407
 Military training, *see* Military education.
 Military Weather Warning Center, severe-
 storm forecasting procedures, analysis,
 notes, 17339
Milk:
 bulk and packaged, costs of transporting
 by truck, 8836
 city milk markets, price warfare, 2168
 consumption and food service patterns in
 selected eastern and midwestern insti-
 tutions, 11935
 cows on farms, production per cow, etc.,
 5683
 evaporated, condensed, and dry, 3246
Federal orders—
 market statistics—
 1966 annual summary, 10204
 summary, monthly, 3295
 summary of major provisions, 9355
fluid—
 consumer response to various levels of
 advertising, 17322
 milk and cream report, 3339
 packaged, sale in Federal milk order
 markets, by size and type of container,
 7835
 foam spray-dried whole milk, trial use in
 institutions, 13946
grade A—
 pasteurized milk and milk products,
 your best buy, 2812
 what you should know about it, 5472
 Import act of 1967, hearings, 10801
 indemnity payments to dairy farmers, ex-
 tend—
 law, 16140
 reports, 14981, 15088
 Instant nonfat dry, how to buy, 15855
 milkshed sanitation, rating methods, 8639
 nonfat dry—
 donated, good choice for thrifty family,
 food value, use, recipes, 9336
 instant, good choice for thrifty family,
 description and use, 9334
 ordinance, recommendations, 1965 grade
 A pasteurized milk, 14624
 pasteurization, facts, 14746
 prices, economic report, 4539
 procurement by Defense Dept., price ad-
 justments, amend U.S. Code—
 law, 410
 reports, 689, 907
production—
 balance between supply and demand (ad-
 dress), 4101
 disposition and income, 8847, 10109
 monthly reports, 1643, 2940, 3560, 7199,
 8756, 11880, 15806
 1966, statistical summary, 7200
 proteins, dye-binding evaluation method,
 4152
 special school program for children, ex-
 tend—
 closing nutrition gap, 15871
 law, 373
 report, 663
 white magic, guide for program aides in
 home economics, 47
Milking, cows, time and travel required,
 effect of layout, equipment, and routine,
 4151
Milking Shorthorn cattle, *see* Cattle.
 Miller, Charles D. performance investiga-
 tion of 8-inch hubless pump inducer in
 water and liquid nitrogen, 6860
 Miller, D. R. BWR core-conceptual design,
 7423
 Miller, Dale C., child protection under Fed-
 eral hazardous substances act, 12552

Bu
 Bu
 Ca
 Ca
 Ce
 Ch
 Co
 Co
 Cy
 De
 Ea
 Et
 Eu
 Fl
 Ga
 Ge

- Bu
 Bu
 Ca
 Ca
 Ce
 Ch
 Co
 Co
 Cy
 De
 Ea
 Et
 Eu
 Fl
 Ga
 Ge

Minerals—Continued

industries—continued
 census, 1963—continued
 final subject statistics, announcement and order form, 4263
 fuels, electric energy, and selected supplies used, 7470
 power equipment used, subject statistics, 7471
 publication program, 5819
 size of establishments, 7467
 subject statistics, 5848, 7466-71, 8035
 general summary, 7466
 type of operation, subject statistics, 8035
 type of organization, 7468
 employment and injuries, minerals
 yearbook chapter, 2537
 enterprise statistics, 1963, preliminary reports, 3241
 injury experience, employment, and worktime, 8342, 15465
 metallic, injury experience, 11355
 Montana water requirements and uses, 2539
 review, minerals, yearbook chapter, 5132, 6689
 water use, census of mineral industries, 5848
 Wyoming water requirements and uses, 12796
 Industry, minerals yearbook chapter—
 Afghanistan, 6642
 Africa, 12805
 regional review, 12812
 Alabama, 2543
 Alaska, 5108
 Algeria, 2549
 Angola, Mozambique, and Portuguese Guinea, 9758
 Argentina, 15466
 Arizona, 6643
 Arkansas, 6644
 Australia, 5109
 Austria, 8343
 Basutoland, Bechuanaland, and Swaziland, 11357
 Belgium, 15467
 Bolivia, 12798
 Brazil, 16857
 British Guiana, 14330
 British Honduras, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama, 14331
 British Solomon Islands, Christmas Island, Fiji Islands, Makatea, Nauru and Ocean Islands, New Caledonia, New Hebrides, and Papua and New Guinea, 9759
 Bulgaria, 6645
 Burma, 2550
 California, 6646
 Cambodia, Hong Kong, Laos, North Viet-Nam, South Viet-Nam, 11358-359
 Canada, 6647
 Caribbean Islands, 14332
 Ceylon, 8344
 Chile, 12799
 China, mainland, 5115
 Colombia, 11360
 Colorado, 8345
 Congo (Leopoldville), 12800
 Cyprus, 6648
 Czechoslovakia, 2551
 Denmark, 8346
 East Germany, 8347
 Ecuador, French Guiana, Paraguay, and Uruguay, 11361
 Ethiopia, 6649
 Europe, regional review, 15473
 Far East, regional review, 11367
 Florida, 5110
 France, 16858
 Gabon, 8348
 Georgia, 2552

Minerals—Continued

industry, minerals yearbook chapter—continued
 Germany, Federal Republic, 12801
 Ghana, 8349
 Greece, 15468
 Greenland, 8350
 Guinea, 8351
 Hawaii, 2553
 Hungary, 5111
 Idaho, 1400
 Illinois, 6650
 India, 8352
 Indonesia, 6651
 Indonesia, 6652
 Iowa, 2554
 Iran, 8353
 Ireland, 12802
 Italy, 14333
 Ivory Coast, 8354
 Japan, 12803
 Kansas, 6653
 Kentucky, 2555
 Kenya, Tanzania, and Uganda, 8355
 Kuwait, 2556, 8356
 Kuwait-Saudi Arabia Neutral Zone, 5112
 Latin America, regional review, 12813
 Lebanon, 5113
 Liberia, 6654
 Libya, 6655
 Louisiana, 5114
 Luxembourg, 6656
 Malaysia, 6657
 Malaysia and Singapore, 6658
 Maryland, 5116
 Mexico, 12804
 Michigan, 5117
 Minnesota, 2557
 Mississippi, 2558
 Missouri, 6659
 Montana, 6660
 Morocco, 8357
 Near East, regional review, 6672
 Nebraska, 2559
 Netherlands, 11362
 Nevada, 8358
 New Hampshire, 2560
 New Jersey, 1401
 New Mexico, 6661
 New York State, 5118
 New Zealand, 8359
 Nigeria, 6662
 North America, regional review, 11368
 North Dakota, 8360
 North Carolina, 5119
 North Korea, 1402
 Norway, 11363
 Ohio, 6663
 Oklahoma, 6664
 Oregon, 2561
 Pakistan, 8361
 Pennsylvania, 8362
 Peru, 11364
 Philippines, 2562
 Poland, 2569
 Portugal, 11365
 Republic of South Africa, 9760
 Rhode Island, 1403
 Rhodesia (Southern Rhodesia), Zambia, and Malawi, 12806
 Romania, 6665
 Senegal, 8363
 Sierra Leone, 2564
 South Asia, regional review, 8373
 South Carolina, 1404
 South Dakota, 5120
 South Pacific, regional review, 6673
 South-West Africa, 8364
 Spain, 12807
 Sudan, 8365
 Surinam, 8366
 Sweden, 15469
 Switzerland, 8367
 Tennessee, 6666
 Texas, 6667
 Thailand, 8366

INDEX 1967

Minerals—Continued

industry, minerals yearbook chapter—continued
Tunisia, 6668
Turkey, 8369
U.S.S.R., 15470
United Kingdom, 12808
Utah, 5121
Venezuela, 12800
Vermont, 1405
Virginia, 6669
Washington State, 2565
West Virginia, 6670
Wisconsin, 6671
Wyoming, 2566
Yugoslavia, 16859
mineral content in municipal water supplies, economic effects, 14199
mineral-deposit and mine sample and assay data analyzing, statistical techniques, 14322
mineral nutrient requirements of *Chlorella sorokiniana* in continuous pure culture, 14779
mineral trade notes, monthly inventory, 3563
mineralogy of tungsten deposits, 1st all-Union conference, 1157
minerals and primary products, Federal item identification guides for supply cataloging, supplements, 3291
minerals and related substances X-ray crystallographic data, molar volumes, and densities, 17818
minerals in world economy, minerals yearbook chapter, 15471
mining and mineral operations in U.S. visitor's guide, 8370
nickel- and cobalt-bearing, magnetic susceptibility, 17911
nonmetallic, except fuels, mining, 1963 census of mineral industries, 10342
production, statistical summary, minerals yearbook chapter, 8379
prospecting, suggestions for prospectors, techniques, etc., 9575
publications, price list, 2803
resources—
Alaska, print additional copies, report, 13651
Bosque del Apache National Wildlife Refuge, 17821
briefing, hearings, 10655
California, 2124
code of Federal regulations, 6284
Desolation primitive area, Sierra Nevada, Calif., 11169
Devil Canyon-Bear Canyon, primitive area, Calif., 8155
High Uintas primitive area, Utah, 12598
Missouri, 15055
print report as Senate document, report, 9276
Mount Baldy primitive area, Ariz., 8156
Pine Mountain primitive area, Ariz., 11168
Salt Creek area, Bitter Lake National Wildlife Refuge, 17821
Ventana primitive area, Monterey County, Calif., 12604
saftey officer, examination announcement, 4392
silicate, far infrared spectra, study, 9841
South America, fertilizer minerals, sources, 1110
supplements, FDA fact sheet, 6359
USSR industrial development, translations, 4020
yearbook, 1964 area reports, international—
departmental edition, 1406
document edition, 515
yearbook, 1965—
area reports, domestic—
departmental edition, 12810
document edition, 12194

Minerals—Continued

yearbook, 1965—continued
metals and minerals except fuels—
departmental edition, 9761
document edition, 9049
mineral fuels—
departmental edition, 11366
document edition, 10495
see also Strategic materials—also names of minerals.
Minerals Exploration Office, annual reports, 8335, 16847
Mines and mining:
assigning area of influence for assay obtained in mine sampling, 12815
deep mine stress determinations using flatjack and borehole deformation methods, 6676
domestic industry, stockpile program and its relationship, hearings, 2051
exploration expenditures in case of mining, income tax deductions, report, 650
flexible liners for underground support, 5128
ILO—
convention concerning employment underground of young persons in mines, medical examination for fitness, 16160
recommendations concerning conditions of employment of young persons in underground mines, 16160
metal mining, census of mineral industries, 1963 industry statistics, 8934
mine and mineral-deposit sample and assay data analyzing, statistical techniques, 14322
mine superstructures and surface equipment, USSR study, 1249
minerals, nonmetallics, except fuels, 1963 census of mineral industries, 10342
mining—
and mineral operations in U.S., visitor's guide, 8370
industries, 1958, interindustry structure, 11356
must it destroy our land? announcement and order form for conservation publication, 14614
phosphate, pneumatic vibrating-blade planer test operation, research progress report, 1411
production-scheduling model and critical path analysis of development work for long-range planning, 9786
prospector, cowhand, and sodbuster, historic places associated with mining, etc. in trans-Mississippi West frontier, 13008
publications, price list, 2803
scientific labor organization proves effective at Siberian mining institute, 14263
stresses and displacements surrounding open pit in gravity-loaded rock, 14356
surface mining and our environment, special report, 14201
see also Coal mines and mining—Hydraulic mine filling—Mine drainage—also names of metals and minerals mined.
Mines Bureau:
Albany Metallurgy Research Center, metallurgical progress reports, 1807, 5795
appropriations, 1968, hearings, 7734
area report, annual, 3038
bulletins, 6631-32, 8337, 11351, 12795, 14322-325, 16848-850
coal-fired gas turbine research project, test of new turbine blade design, 9772
information circulars, 2538-43, 1398, 5104-5, 6635-40, 8339-41, 9754-56, 11352-356, 12796-797, 14324-329, 15464, 16853-856, 17911-912
press releases, 3744
programs, briefing, hearings, 10655
publications—
and articles, 1965, list, 2547
monthly list, 3622

Mines Bureau—Continued
 report of investigations, 1408-14, 2570-88, 5124-31, 6674-88, 8374-78, 9763-92, 11369-389, 12814-831, 14334-361, 15474-483, 16861-867, 17913-916
 Mingo County, W. Va., coal, carbonizing properties, 5130
 Miniature capacitive accelerometer is especially applicable to telemetry, 1470
 Miniature telemetry system accurately measures pressure, 6786
 Miniaturization:
 double-focusing mass spectrometer, evaluation, 2599
 microminiature dc signal-conditioning amplifier, development, 14483
 microminiature thermocouple monitors own installation, 1460
 personal communication system combines high performance with miniaturization, 11456
 piezoelectric triaxial accelerometer measures cranial accelerations, 2659
 slip rings, environmental study, 14419
 Minimax attitude control of aeroballistic launch vehicles, errata, 1419
 Minimum-impulse time-free transfer between elliptic orbits, 1432
 Minimum principle in calculus of variations, 4995
 Minimum wage, *see* Wages.
 Mining, *see* Mines and mining.
 Mining claims, *see* Mineral lands.
 Mining engineering:
 flexible liners for underground support, 5128
 stress ellipsoid determination in rock-burst-prone area, 14351
 Mining machinery:
 and equipment, current industrial reports, 1431, 15999
 equipment, Federal item identification guides for supply cataloging, supplements, 3285
 nonuniform radial loads applied to boundary of circular hole in infinite plate, 17914
 pneumatic transportation of solids, symposium, 2542
 Ministers of religion, *see* Clergy.
 Minkin, Herbert L., performance of turbine-type flowmeters in liquid hydrogen, 2728
 Minks, extinct sea mink, with taxonomic notes, 6964
 Miniutti, Victor P., microscopic observations of ultraviolet irradiated and weathered softwood surfaces and clear coatings, 14123
 Minneapolis, Minn., area wage survey, 11313
 Minnesota:
 access highway through Manitoba, Canada, to northwest angle of Minnesota, construct, agreement, report, 2096
 area measurement report, 13360
 census of agriculture, 1964, State and county statistics, 10391
 census of manufactures, 1963, area statistics, 159
 census of mineral industries, 1963, area statistics, 5531
 climatological data, 3096
 county business patterns, 172, 12051
 dairy manufacturing firms, utilization of plant capacity, 12454
 mineral industry, minerals yearbook chapter, 2557
 national forests, private pleasure boating, 8068
 northern, lumber production declines, 14100
 pollution of Interstate and Intrastate waters of upper Mississippi River and its tributaries, conference, proceedings, 14052, 15253
 postal map, 15659
 precipitation data, hourly, 3401

Minnesota Chippewa Tribe, *see* Chippewa Indians.
 Minor, J. E., investigation of low-level radioactive waste containers in accident environment, etc., 8909
 Minor elements, *see* Chemical elements.
 Minorities:
 books for schools and treatment of, hearings, 2045
 colored, and present British policies, 9747
 employment in Federal Government, 1930
 minority groups in Republic of Vietnam, ethnographic study series, 5735
 Minors, *see* Children.
 Minot, N. Dak., Souris River Valley, geohydrology of area, 14184
 Minsk, L. C., prevention of accumulation of snow and ice on open mesh metal panels, 8879
 Mint (plant):
 mint for oil, acreage, production, etc., 1959-65, revised estimates, 14782
 Mint Bureau:
 annual report, 8381
 operating fund, financing, hearing, 10818
 Mints:
 mint marks on coins, permit—hearing, 10817
 law, 12171
 reports, 10602, 10765, 12248
 Mintz, Milton S., transport of electrolytes through membrane systems, 15332
 Minute Man National Historical Park, general information, 17053
 Minutillo, Rose, relief, 7656
 Miocene period, *see* Calvert Formation.
 Miquel Franca, Jorge I., relief, 267, 581
 Miranda y Montegudo, Maria Y. R., relief, 9199, 12144, 12212
 Mixex, use in control of Texas leaf-cutting ants, 2325
 Miridae, *see* Hesperolabops.
 Mirrors:
 rearview, for automotive vehicles, Federal standard, 6325
 transmission of light through plane water surface and its return by submerged retroreflector, 13031
 Miscellaneous collection series, *see* Smithsonian miscellaneous collection.
 Miscellaneous papers, *see* names of departments, etc., issuing papers.
 Miscellaneous publications, *see* names of departments, etc., issuing publications.
 Missile bases, Arkansas Titan II missile site disaster, survivor benefits payable, actuarial analysis, 7115
 Missiles:
 antiballistic (ABM), status—
 policy decisions, cost estimates, etc., staff memorandum, 7746
 technical development (statement), 7808
 antimissile defense, USSR study, 9676
 ballistic reentry trajectories at velocity of 50,000 f.p.s., 12932
 dynamic characteristics of variable-mass slender elastic body under high accelerations, 5188
 fuel, Air Force Dept. procurement from sole-source supplier, GAO review, 9651
 guide, Federal item identification guides for supply cataloging, supplements, 3293
 guided, preferred items list, electronic and electromechanical, military standard, 7862
 military procurement—
 appropriations, 1967, report, 2014
 appropriations, 1967, supplemental—
 hearings, 6031, 7799
 law, 9035
 reports, 8087, 7665, 7667, 7673
 appropriations, 1968—
 hearings, 7797, 9149
 law, 12164
 reports, 7786, 10570, 10575, 10611
 publications, price list, 5419

INDEX 1967

Missiles—Continued

structural response with different forms of damping, analysis, 14450
structures and power sources surface-to-air missile series, engineering design handbook, 15928
Titan IIIC, matrix-Holzer analyses for fully-coupled vibrations of clustered launch-vehicle configurations, 5158
U.S. sites, work stoppages, analysis, 5403, 15141
winged model, water-landing characteristics, 9872

Mississippi:

area measurement reports, 4267
bromide and iodide in oilfield brines in some Tertiary and Cretaceous formations, 13385
census of agriculture, 1964, State and county statistics, 13407
census of manufactures, 1963, area statistics, 1842
census of mineral industries, 1963, area statistics, 4290
climatological data, 3096
coast, hurricane survey, engineer report—departmental edition, 10957
document edition, 10506
congressional districts, 90th Congress, 183
cotton, spinning quality as affected by gin cleaning, etc., 1965-66 season, 5647
county business patterns, 1866, 12052
District Court, eastern division of northern district, terms to be held at Ackerman—
law, 16138
report, 12379
landings, fish and shellfish, 3564, 16615
mineral industry, minerals yearbook chapter, 2558
post study, wood preservatives, comparison, 1967 progress report, 11110
postal map, 15660
precipitation data, hourly, 3401
salt domes, survey, 2541
soil survey, laboratory data and descriptions, 13124
statehood, commemorative stamp (poster), 18137
war on poverty, examination, hearings, 12420

Mississippi River and Valley:

bridge at Rock Island, Ill. to Davenport, Iowa, reconstruction, etc., authorize construction of additional span, report, 2095
daily Mississippi River stage and forecast bulletin, 3177
daily Missouri-Mississippi River bulletin, 3177
fisheries, 1965, annual summary, 9513
flood control in lower valley, 8382
flood protection to agricultural areas above Ohio River, engineers report—
departmental edition, 4732
document edition, 4472
Fort Madison, Iowa navigation, project, engineer report—
departmental edition, 4733
document edition, 4470
Gulf outlet, New Orleans, La. to Gulf of Mexico, navigation maps, 8383
light list and other marine aids, 9004
Mississippi River and tributaries, stages and discharges in—
Memphis district, 12476
St. Louis district, 13982
Vicksburg district, 12477
soil, sediment, and water, monitoring agricultural pesticide residues, preliminary report of studies, 4086
surface water quality, upper basin, 2375
transportation lines on river system, 2219

Mississippi River and Valley—Continued

upper—
and its tributaries, pollution of interstate and intrastate waters, conference, proceedings, 14052, 15253
zinc-lead district, aeromagnetic and tectonic analysis, 4888
zinc-lead district, geology (series), 6388
Mississippi River Commission:
member, nomination of Willard Roper, hearing, 16433
nominations, hearing, 12427
Mississippi Territory, service records, microcopy, pamphlet to accompany War of 1812 volunteers, 18070
Mississippian period, Big Snowy and Amsden groups and Mississippian-Pennsylvanian boundary in Montana, 15309
Missouri:
air pollution study, 5438-42
area measurement reports, 17421
census of agriculture, 1964, State and county statistics, 13404
census of business, 1963, retail trade, area statistics, errata, 10340
census of manufactures, 1963, area statistics, 1843
census of mineral industries, 1963, area statistics, 4291
climatological data, 3096
cordwood yields from thinnings in young oak stands in Missouri Ozarks, 2307
county business patterns, 4312, 12053, 14820
electric rate book, 12510
highway safety study, Operation 66, joint engineering-enforcement project report, 1594
mineral and water resources, 15055
print report as Senate document, report, 9276
mineral industry, minerals yearbook chapter, 6659
Ozarks, shortleaf pine seedling inventory, methods on broadcast-seeded areas, 8072
precipitation data, hourly, 3401
shortleaf pine, stand volume equations, 14094
southwest, establishing grass range in Ozarks, 14092
water resources development projects, 15055
Missouri Basin Inter-Agency Committee:
annual programming report, 1967-69 fiscal years, 16868
annual report on progress, 5137
minutes—
146th meeting, 5138
147th meeting, 14362
148th meeting, 16869
149th meeting, 16870
Missouri River and Valley:
daily Missouri-Mississippi River bulletin, 3177
floods, magnitude and frequency, 1129
surface water quality, 2375
Missouri River Basin, progress, quarterly report, 3777
Missouri River Basin project:
Almena unit, revised procedures for determining irrigation benefits, GAO review, 12590
appropriations, authorization, increase—
law, 17543
reports, 10739, 15004
Nebraska mid-state division, construct, operate, etc., reports, 13671, 14955
Oahe unit, James division, S. Dak., construction hearings, 17656
Yellowtail unit, general information, 2848
Mistletoe:
Arcanthobium, seed collection and storage, 9541

Mistletoe—Continued
dwarfmistletoe—

parasitizing true firs in California, biology and pathology, 5685
spread into Jeffrey pine plantation, trees infected after 22 years, 16658

Mitchell, George W.:
remarks—

Nov. 11, 1966, 1068
Nov. 30, 1966, 2261
Dec. 28, 1966, 4786
Mar. 8, 1967, 6297
Apr. 21, 1967, 9494
May 13, 1967, 11032
Aug. 21, 1967, 15248
Sept. 23, 1967, 16593

Mitchell, Lloyd V., radiosonde dew-point accuracies 40° C to -40° C, 15884

Mitchell, Robert T., protecting corn from blackbirds, 16637

Mitchell, Russel G.:

infestation characteristics of balsam woolly aphid in Pacific Northwest, 4852
translocation of dye in grand and subalpine firs infested by balsam woolly aphid, 11116

Mitchell, Vernal C., consumer purchases of citrus fruit, juices, drinks, and other products, 3145

Mitchell, William L.:

dizziness and vertigo in aviators, 17359
incidence of ear, nose, and throat diseases in 400 space and test pilot candidates, 14781

Mitchell sandstone. *see* Sandstone.

Mitosis. *see* Karyokinesis.

Mittens. current industrial reports, 4328, 13392

Mixer conditions temperature of liquified gas streams, 5219

Mixers (communications):

compact microwave mixer has high conversion efficiency, 6787

Mize, Mamie L., Federal facilities for Indians, tribal relations with Federal Government, reports, 10804-805

Miyauchi, David, application of radiation-pasteurization processes to Pacific crab and flounder, 13348

Milinko, Aranka, relief, 10550

Moab, Utah, regional geophysical investigations, 2368

Moab mining district, uranium deposits, 6391

Moapa Valley Water Company, relief, 250

Moberg, M. L.:

trace contaminants—
contained in samples from closed environment at 258 mm. Hg., 10234

in closed ecologic atmospheres, 7350

Mobile homes. *see* Trailers.

Mobile trade fairs, guide to prospective operators, 4922

Mobility:

environment survey in El Real, Darien Province, Panama, 8895
integrated mobility measurement and notation system, 11451

labor, selected references, 15432

see also Geographic mobility—Mechanical mobility.

Mobilization. *see* National defense—Production.

Mobley, Hubert L., soil survey of Comanche County, Okla., 15746

Modal combination computer program for dynamic analysis of structures, 15327

Modal split, documentation of 9 methods for estimating transit usage, 7100

Model makers, non-metal, examination announcement, amdt., 203

Model Reporting Area for Blindness Statistics:

conference proceedings, 11751

statistical report, 11742

Modeling:

olfactory sense simulation, USSR studies, 1326

selecting a harem and other applications of policy capturing model, 15893

Models (structural):

scale effect on structural-joint damping, 18025

scaled, application of distorted models in developing, 16956

Modoc National Wildlife Refuge:

birds, list, 11082

general information, 1079

Modulators:

double emitter suppressed carrier, design using commercially available components, 9856

electro-optic light, 1489

light-intensity, withstands high heat fluxes, 2657

single-sideband, accurately reproduces phase information in 2-Mc signals, 1446

wideband, high efficiency optical modulator requires less than 10 watts drive power, 16944

see also Laser modulators—Light modulators—Pulse modulators.

Module (measurement unit):

Apollo command module, stability characteristics, 8500

Modules:

lunar module rendezvous, sextant navigation measurements, analysis, 6903

pilot controlled docking simulation of Apollo command and service module with lunar module, 2689

see also Electronic modules.

Moe, Lyle E., Saudi Arabia, supply and demand projections for farm products to 1975, with implications for U.S. exports, 7886

Moe, Herbert H., milk consumption and food service patterns in selected eastern and midwestern institutions, 11935

Moehring, David M.:

converting pin oak flat to pine, 14121

diameter growth and foliar nitrogen in fertilized loblolly pines, 8094

properties of forested loess soils after repeated prescribed burns, 8091

Moench, Robert H., geology and uranium deposits of Laguna district, N. Mex., 8165

Moffett, Roy K., paper, May 22-24, 1967, 12785

MOFSET analog memory circuit achieves long duration signal storage, 6766

Mohair:

production—

1960-64, revised estimates by States, 7297

price and value, 8763

Mohammedanism:

Bolshevization of Islam, 6496

Islam, primitive magic, USSR views, 2452

Muslim teachings and education reviewed in Soviet press, 1252

Mohler, Stanley R.:

impairment of airmanship by alcohol, 4251

in-flight response to new non-gyroscopic blind flight instrument, 141

oxygen in general aviation, 4250

Protecting AG pilot, 140

Mohr, B., planetary ionospheres, 12847

Molsan, Gaston, green-winged teal, its distribution, migration, and population dynamics, 14067

Moisture:

conservation for wheat production, 4088, 11923

content of—

pine foliage, seasonal fluctuation, 2305

wood products in use, accurate determination, probe, 2298

cyeling of trussed rafter joints, 8101

INDEX 1967

Moisture—Continued
 entrapped in honeycomb sandwich structures, detecting techniques, 11453
 retention-capacity of litter under Arizona chaparral communities, 14112
 soil depletion by gambel oak, 4831
Mojave Desert, western, areal geology, 17824
MOL (manned orbiting laboratory), *see* Satellites.
Molar volume minerals, 17818
Molasses:
 industrial, marketing in United States, 4699
 market news—
 annual summary, 7829
 weekly, 3565
Moldavian Soviet Socialist Republic:
 Academy of Sciences, work reviewed, 8272
Main Pharmacy Administration, proposals for improving labor organization, USSR study, 15422
Molds (forms):
 form lumber, deleterious effects on concrete surfaces, 13988
Molecular biology, *see* Biology.
Molecular hydrogen, *see* Hydrogen.
Molecules:
 biological macromolecules, study, light scattering method, Rumania, 14234
 crystal microbalance measures condensable molecular fluxes, 6744
 electric dipole moments, in gas phase, selected values, 17035
 ligand, role of ionization potential, research, 9588
 macromolecular—
 chemistry field, electron spin resonance research conducted in Hungary, report, 11256
 determination of elasticity and shape, USSR study, 15414
 metastable, of atmospheric interest, 4153
 molecular—
 bases of pathology, USSR study, 11267
 vibrational frequencies, tables, 8524, 18077
 NF, unknown, ground, ionized and excited states, prediction, 5181
 quantum mechanical study, 5181
Moline, Ill., area wage survey, 6606
Molten-salt electrorefining vanadium scrap, 47916
Molybdenum:
 disposal from national stockpile, report, 14936
 hydrocarbon synthesis, use as catalyst, 12827
 report, monthly, 3566
 Ti-8Al-1Mo-IV simulated wing structure, fusion welded, fatigue behavior, 16905
Molybdenum carbide, thermodynamic data, 1410
Molybdenum disulfide, bonded with microfibrous boehmite, as dry-film lubricants, 10001
Molzon, Arnold E., encapsulation of electronic parts in plastics, review, 7864
Moments, thermal bonding plus twist of thin-walled cylinder of open section with application to gravity gradient booms, 15561
see also Magnetic moments.
Moments of inertia, asymmetrical objects, automatic system determines, 6798
Momentum, *see* Angular momentum—Molton.
Momyer, William W., testimony, hearing, 16394
Monazite, geologic occurrence, 17826
Mondays, Monday holidays, hearings, 15167, 16332
Le Monde (periodical):
 index, 3411

Mones, Gerda, current retail trade reports, 1966 retail trade, annual sales, etc., 17439
Monetary policy, *see* Money.
Money:
 bank—
 credit and monetary developments, 8002
 banking and monetary statistics, 14038
 supplement, 2264
 cash contribution by Japan for mutual defense, agreement, 15778
 code of Federal regulations, 6285
 commodity money (remarks), 15248
 currency and coin, outstanding and in circulation, monthly statement, 3897
 current problems of monetary policy (remarks), 1068
 demand deposits, currency, etc., 3567
 flow of funds—
 annual, 2259
 assets and liabilities, 1062, 2260
 foreign currencies—
 conversions, procedures, 8772
 U.S. owned excess, feasibility of using instead of dollars to pay for ocean shipment of military assistance program materiel, Defense Department and other Govt. agencies, GAO report, 4866
 U.S. travelers can assist balance of payments, 11887
 foreign exchange rates—
 monthly, 3346
 weekly, 3347
 how to get money for college, 16501
 international monetary policy, contingency planning, statements, 4461
 international monetary reserve asset, new kind (statement), 14709
 international monetary reserves, new plan to supplement existing assets, hearing, 17563
 know your money, 5482
 liquidity and monetary management in 1967 (remarks), 16593
 living with monetary management (remarks), 11052
 monetary policy—
 and economic activity, postwar review, 11054
 and mortgage market (remarks), 1064
 and residential mortgage market, 11055
 financial liquidity, and outlook for corporate profits (remarks), 11056
 framework, as used by Federal Open Market Committee, analysis, 7740
 interest rate ceilings, and future of residential financing (remarks), 7999
 market decisions, and behavior of interest rates (remarks), 8000
 monetary policy (remarks), 9493-94, 16598
 monetary system, consolidated condition statement, 3046
 monetary theory and policy, domestic aspects, bibliography, 8001
 open market rates and bond prices, monthly, 3655
 recent credit and monetary developments, 16594
 reserved foreign currencies, use in lieu of dollar for current expenditures, law, 395
 respective roles of monetary, fiscal and wage price guidepost policies in 1967 (remarks), 1965
 special foreign currency science information program, 1967 list of translations in process, 7551, 17464
 supply and time deposits, 3567
 supply series, revision, 16596
 tradition and innovation in monetary management (remarks), 2265

Money—Continued

treasury notes payable in foreign currency—
law, 513
summary, 9177
legislative history, 7762
report, 702
Senate amendments, summary, 4567
withdrawal of cash from Treasury for advances under Federal programs, 7207
world monetary system for greater society of nations (remarks), 8777
Mongolia, translations, 3961

Monitoring:

automatic indirect blood pressure device, design, etc., 73
biomedical, during dynamic stress testing—
Flack test, 7360
instrumentation and normal values, 7343
Levy hypoxia test, 7344
maximum exercise tolerance, ergometer, 7361
tilt table orthostatic tolerance test, 7362
circuit accurately measures movement of solenoid valve, 2676
closed circuit TV system-monitors welding operations, 12893
computer/PERT technique monitors actual versus allocated costs, 8458
instantaneous, multicomponent expired gases, 2601
IR vidicon scanner monitors many test points, 15545
magnetoresistor monitors relay performance, 6810
microwave, of sea water contamination of Navy fuel oils, 15637
multiple meter circuits served by single alarm, 17980
optical monitor panel provides flexible test panel configurations, 2634
radiation monitoring, programmed instruction book, 15973
radioisotope gauge for monitoring suspended sediment concentration in rivers and streams, 1794
resistor monitors transfer of liquid helium, 6750
security warning system monitors up to 15 remote areas simultaneously, 2665
spray-on electrodes for ECG of physically active subjects, 9825C
system determines amplitude and time of vibration channel, 8479
see also Radiation monitoring.

Monitors (aeronautics):

monitor assures availability and quality of communication channels, 8460

Moniz, William B., NMR method for determining organic loading of charcoal, 14597

Monkeys:

behavior of Ateles Geoffroyi and related species, 5500
gamma irradiated plant food effect on, USSR study, 6371
Macaca irus, calcium, phosphorus, and nitrogen mobilization resulting from conditions of inactivity, study, 5707
Macaca mulatta—
normal values for clinical blood chemistry tests, 7368
temperature-sensing telemetry systems, 17360
motor reflexes, biologically dissimilar, effect of cholinolytics, USSR study, 9641

Monnin, Carl P., comparison of Gryzinski and Born cross sections for metastable 2s state of atomic hydrogen, 9874
Mono Craters quadrangle, Calif., structure and metamorphism, 4887

Monoamine oxidase, inhibitions by convulsogenic doses of hydrazines and related B-hydrazones, 4181

Monographs, *see* names of departments, etc., issuing monographs—*also* subjects.
Monolayers, *see* Monomolecular films.
Monolith lysimeters, *see* Lysimeters.
Monomers, highly halogenated, synthesis, 9855

Monomethylhydrazine:

effects on—
coagulation mechanism, 17361
methemoglobin production in vitro and in vivo, 14773
renal function, 15901
toxicity, on frog cornea, 10242

Monomolecular films:

effects on monolayers on insects, fish and wildlife, 7102
polydimethylsiloxane monolayers, surface viscosity, 8592

Monopoli, Richard V., engineering aspects of control system design via direct method of Liapunov, 5185

Monopolies:

anticompetitive effects of sale of network TV advertising, hearings, 10857, 16424
antitrust laws—

administration, investigation—
authorization, report, 4617
subcommittee activities, report, 9293
nolo contendere and private antitrust enforcement, hearings, 13875
price discrimination legislation, hearings, print additional copies, reports, 916, 2030

Congress and monopoly problem, antitrust field, 1890-1966, history of congressional action, 4561

dual distribution, Clayton act, amend to prohibit vertically integrated companies from engaging in discriminatory practices, etc., hearings, 6115

economic concentration, and divisional reporting, etc., hearings, 6116, 12415

international aspects of antitrust, hearings, 7818, 13874

Justice Department antitrust activities, review, 8280
manufacturing industry, concentration ratios, 2126

supplement, 13362
petroleum, British and U.S., exploit Persian Gulf, 1188

Monopulse radar, cross modulation in Scamp signal processor, 9990

Monroe, Frederick F., feasibility study of wave-powered device for moving sand, 13975

Monroe, John A.:

copper—
industry report, 11th annual statistical supplement, 12027
quarterly industry report, 3150

Monroe County, Miss., soil survey report, 5518

Monroe County, N.Y.:
Red Creek, Genesee River Basin, engineer report—
departmental edition, 2218
document edition, 2067

Montalvo, Irma S. Ruiz, *see* Ruiz-Montalvo, Irma S.

Montana:
alpine snow, mechanical properties, 13292
bark beetle attacks on ponderosa pine trees, distribution, 11115

Big Snowy and Amsden groups and Mississippian-Pennsylvanian boundary, 15309

census of agriculture, 1964, State and county statistics, 8964

census of manufactures, 1963, area statistics, 160

census of mineral industries, 1963, area statistics, 4292
climatological data, 3096
county business patterns, 10350, 17427
electric rate book, 11022

INDEX 1967

- Montana—Continued
mineral industries, water requirements and uses, 2539
mineral industry, minerals yearbook chapter, 6660
northwestern, floods of June 1964, 15314
Phillipsburg district, Granite County, Mont., geology and ore deposits, 15305
postal map, 15661
precipitation data, hourly, 3401
public lands, use of income for schools, etc.—
law, 12177
reports, 10733, 12262
radioactivity, airborne, 1952-55, maps, 1802
sedimentary rocks, chemical composition, 14172
water supply outlook and snow surveys, 4047, 18217
western—
development of progeny of ponderosa pine, 6365
pinus ponderosa, performance of 14-year-old hybrids, 8067
ponderosa pine, natural mortality in old-growth stands, causes, 4830
Montauk Point, N.Y., to Manassas, N.J., coastal warning facilities chart, 14721
Monte Carlo method:
calculation of Doppler coefficients, 18030
code for solution of planar electron-diode problems including electron-neutral elastic collisions, 15558
electron flow in low density argon gas including space-charge and elastic collisions, 14480
plane isotropic buildup factors for bremsstrahlung calculations, 15565
techniques for statistical system performance analysis, determined by computer program, 16950
Monte Vista National Wildlife Refuge, general information, 16260
Montegudo, Maria Y. R. Miranda y, see Miranda y Montegudo, Maria Y. R.
Monteith, L. K., charge storage effects in mylar resulting from electron irradiation, 2610
Monterey Bay, benthic amphipoda, 2751
Monterey County, Calif.:
population, special census, 10373
Ventana primitive area mineral resources, 12604
Monterey pine, see Pine.
Montes, Francisco, relief, 13745, 16215, 17516
Montgomery, Kathleen M., geology of Stewart Flat quadrangle, Caribou County, Idaho, 11162
Montgomery County, Pa., soil survey report, 11807
Month-end storage in major reservoirs in Pacific Northwest, 3907
Monthly:
NOTE.—For all publications which begin with the word "Monthly", see subject, or name of department, etc., issuing publication.
Months, see American History Month—Steelmark Month—also names of special months.
Monticello Dam, vibration studies, 17181
Monticello mining district, uranium deposits, 6391
Montmorillonite:
Uniat bentonite, analysis, etc., 12291
water mixtures, frozen phase composition from heat capacity measurements, 14792
Montrose County, Colo., Delta-Montrose area, soil survey report, 15747
Monument Valley mining district, uranium deposits, 6391
Monuments, heritage to discover, 2184
Moon:
Apollo program pace and progress, 10676
contours through lunation, isothermal and isophotic atlas, 16894
control of thrust axis during planar ascent from lunar surface to circular orbit by manual method, 1490, 14449
docking of lunar module with Apollo command module in lunar orbit, simulation, 11520
exploration and use, treaty on principles governing activities of States, analysis and background data, 7791
landings—
Langley research facility, operational features, 6875
research vehicle, electronic flight control systems, operational experience, 1496
Surveyor III, preliminary report, 14403
lunar charts—
AIC 57C, Encke, 7323
AIC 57D, Maestlin, 7324
AIC 61C, Secchi, 7325
AIC 75A, Flamsted, 7326
AIC 75B, Wichmann, 7327
AIC 76A, Euclides P., 7328
AIC 76B, Fra Mauro, 7329
AIC 77B, Hipparchus, 7330
AIC 78A, Delambre, 7331
AIC 78B, Torricelli, 7332
AIC 79B, Messier, 7333
earthside hemisphere, 15887
earthside reference, 4169
LAC 11, J. Herschel, 10224
LAC 12, Plato, 10225
LAC 23, Rumker, 10226
LAC 24, Sinus Iridum, 7320
LAC 25, Cassini, 7321
LAC 26, Eudoxus, 13263
LAC 62, Mare Undarum, 7319
LAC 96, Rupes Altai, 7322
LAC 113, Maurolycus, 8805
LAC 114, Rheta, 4167
lunar experiments, data sampling rates, multiplexing control device for handling wide variations, 12887
lunar explorers, self-locomotive performance based on experimental reduced-gravity studies, 11501
lunar farside charts, 13264-265, 17341
lunar intersection of tail of earth's magnetosphere, indications, 1284
lunar missions—
abort guidance, manual technique with concentric-flight-plan rendezvous, 14481
Lunar Orbiter I—
extended mission operations, 14395
photographic mission summary, 8429
photography, 14394
lunar orbit mission analysis for improved delta launch vehicle and AIMP-D spacecraft, 11495
lunar satellite, Luna-10—
magnetic field measurements in neighborhood by, 1285
soft corpuscular radiation, study, 1283
spectral composition of gamma radiation, 1281
lunar science and exploration, 1967 summer study, 17952
lunar surface studies, bibliography, 11432
lunar surveying staff concept, penetrometer technique, 11503
publications, price list, 5419
results of experiments for detection of lunar ionosphere made on 1st lunar artificial satellite, USSR study, 4950
Saturn V, manned flight to moon, NASA facts, 12878
solid interplanetary matter in neighborhood of the moon, USSR study, 1286
storage vessel on moon, thermal characteristics, 5259

- Moon—Continued
stratified and multi-faceted forms on lunar panoramas obtained by Luna-9, 1280
- Moon-Blink project, *see* Project Moon-Blink
- Moore, A. M., correlation and analysis of water-temperature data for Oregon streams, 8177
- Moore, Billy J., analyses of natural gases of United States, 2548
- Moore, Charlotte E., solar spectrum 2935Å to 8770Å revision of Rowland's preliminary table of solar spectrum wavelengths, 1522
- Moore, Clarence A., economic evaluation of starch use in textile industry, 7881
- Moore, Felix E., serum cholesterol levels of adults, 8661
- Moore, Gordon E., technique for rearing pales weevil, 9538
- Moore, J. Cordell, remarks, Oct. 6, 1967, 17847
- Moore, John B., \$5.00 regular postage stamp (poster), 1558
- Moore, Norman D., records relating to appointment of Federal Judges, etc., Idaho, Territory and State, pamphlet, 18071
- Moore, Raymond S., guide to higher education, consortiums, 7898
- Moore, Thomas J., brazing tungsten for high-temperature nuclear service in hydrogen, 11506
- Moore, William H., deer browse resources of Uwharrie National Forest, 8124
- Moore County, N.C., school desegregation in quiet sensible way, 15213
- Moorer, Thomas H.:
nomination, hearing, 15148
testimony, hearing, 16394
- Moore Creek National Military Park, general information, 5318
- Moot, Robert C., nomination, hearing, 13848
- Mootchnik, D. L., lunar orbit mission analysis for improved delta launch vehicle and AIMP-D spacecraft, 11495
- Morad, Ali-Haji, relief, 321, 598
- Morale, aircrew, factors affecting, 2d study, 4184
- Morality, *see* Ethics
- Moran, H. E., Jr., permeability and elutriation methods for determining specific surface of dry chemical fire-extinguishing powders, 11678
- Moravia, Alberto, Chinese cultural revolution as seen by, 16736
- Morbidity:
health interview survey, standardized ratios for measures of illness by family size, etc., 7097
- morbidity and mortality weekly report, 3585
- see also* Diseases of animals.
- More about machine thinking, USSR, 2456
- More timber, more jobs, 17798
- Morehouse, Alanson D., III, handling materials safely, 9681
- Morrell, Albert P., relief, 13581, 13786, 14903
- Morm, Raul R., relief, 268, 582, 805
- Morgan, Q. Martin:
Argentina's livestock and meat industry, 11099
- Uruguay's livestock and meat industry, 11098
- Morgan, Roy L., remarks, Nov. 10, 1966, 1949
- Morgan City, La., to Brownsville, Tex., coastal warning facilities chart, 11903
- Morgantown, W. Va., Forestry Science Laboratory, research facility, Northeastern Forest Experiment Station, purpose, work, etc., 14084
- Morgenthaler, John H., supersonic mixing of hydrogen and air, 9807
- Morgis, Genevieve G., State compensatory provisions for occupational diseases, 8337
- Moriches Bay, pollution of navigable waters, conference proceedings, 6339
- Morocco:
agricultural commodities, agreements, 1636-37, 7163, 7176, 8727
- cultural relations, agreement, 10102
- economy, basic data, errata, 1941
- labor conditions, 1383
- mineral industry, minerals yearbook chapter, 8357
- Morphology:
brain tumor cells, use of anoptal microscope, USSR study, 12739
- interphase nucleus, USSR study, 12747
- Morphology (linguistics):
Seneca Indian language, 13001
- Morrell, Lester G.:
mineral industry of—
Australia, 5109
- British Solomon Islands, Christmas Island, Fiji Islands, Makatea, Nauru and Ocean Islands, New Caledonia, New Hebrides, and Papua and New Guinea, 9759
- Canada, 6647
- Greenland, 8350
- New Zealand, 8359
- regional mineral industry review of—
North America, 11368
- South Pacific, 6673
- Morrice, Edward, electrowinning high-purity neodymium, praseodymium, and didymium metals from their oxides, 11384
- Morris, D. A., summary of hydrologic and physical properties of rock and soil materials, as analyzed by Hydrologic Laboratory of U.S. Geological Survey, 8182
- Morris, Dolores G., convey land to, 4494
- Morris, Gwilym L., estate, convey land to, 4494
- Morris, Meredith J., grassland research, 10185
- Morrison, Warren E., review of mineral-fuel industries, 5132
- Morrison formation, *see* Jurassic period.
- Morro Bay, polychaeta and amphipoda, benthic survey, 6956
- Morrow, T. H. Jr., helicopter standard marking pattern, 17734
- Morrow Point Dam, hydraulic model studies, 13103
- Morsh, Joseph E.:
impact of computer on job analysis in Air Force, 13268
- job types identified with inventory constructed by electronics engineers, 4170
- Mort, Kenneth W., wind-tunnel investigation of 7-foot-diameter ducted propeller, 15573
- Mortality, *see* Death.
- Mortgage insurance:
companies, income tax deductions, report, 15093
- dealers and individuals subject to certain section of title 1, National housing act, list, 11010
- FHA—
group practice facilities program, information guide and instruction handbook, 14024
- home—
area trends, 9454, 12504
- regulations, amendments, 1046, 6250-53, 11011
- State trends, 9455, 12506
- housing for the elderly, 6427
- multifamily projects, handbook, 2245
- project, regulations, amendments, 1047, 6254-56, 7963-65, 11012-13, 12505
- rental and cooperative housing for families of low and moderate income, 12624
- urban renewal, consumer bulletin, 11203
- veterans' homes, 11201

INDEX 1967

Mortgage Insurance—Continued

- FHA multiple dwelling projects, investigation—
 - hearings, 2118, 9314
 - report of findings, 12392
- group medical and dental practice facilities, constructing and equipping, law, 465
- summary, section-by-section analysis, legislative history, and conference report, 725
- housing digest, 6433
- investment of institutional funds in FHA insured mortgages, 12626
- mortgagee's handbook, home programs, FHA manual, revisions, 4767-69, 14025
- nonfarm, investments of life insurance companies, 15241
- nursing homes, FHA-assisted program, 1965 survey, 6435
- title 10, FHA land development handbook, 16575

Mortgages:

- can mortgage market be made more effective? (remarks), 7996
- credit, study, housing, real estate, etc., statements and recommendations, by Federal agencies, 10821
- credit to meet housing needs, Federal policies, hearings, 15151
- discounts, report by HUD, 6091
- farm—
 - lending experience of life insurance companies, etc., 9395
 - mortgage act, etc., 1983
 - mortgage debt, 2175

FHA—

- homes, regulations, amendment, 17757
- insured, investment of institutional funds in, 12626

home—

- FHA guidelines for payments, 6428
- FHA trends, 3333
- mortgage debt, estimated, quarterly, 3244

- liquidity in market, attaining (address), 9452

- monetary policy and mortgage market (remarks), 1064

- monetary policy and residential mortgage market, 11055

- nonfarm real estate foreclosure report, 3637

- recording letter, monthly, 3586

- savings and mortgage lending activity, selected balance sheet items, FSILC insured savings and loan associations, 3365

- ship, fees for and retention of certified copies—

- hearings, 4552

- law, 364

- report, 887

- ship, transfer authority to approve surrender of documents—

- hearings, 9159, 10849

- message from the President, 7598

- stimulate flow of credit for FHA and VA assisted residential construction, report, 4502

- Veterans Administration—

- foreclosures, handling by Justice Department—

- hearings, 15031

- report, 14947

- Morton, Conrad V., genus *Grammitis* in Ecuador, 17049

- Morton, James G.:—

- addresses, etc.—

- Jan. 17, 1967, 4428

- Jan. 23, 1967, 4424

- Apr. 11, 1967, 7561, 9009

- Apr. 17, 1967, 7582

- May 4, 1967, 9011

- Mosaic disease, problem of possibility of infecting animal cells with ribonucleic acid of tobacco mosaic virus, USSR study, 6486

Mosaics:

- lunar charts, earthside hemisphere, 15887
- lunar reference, earthside hemisphere, 4168

Moscow, Russian SFSR:

- East of the Elbe, study mission report, 6104

- Moscow production of Max Frisch's *Don Juan* criticized, 3541

- Moscow, Battle of, 1941-42, reminiscences of G. Zhukov and I. Konev, 1287

- Moscow Naturalist Society, Biophysics Section, activity, 4971

- Moscow Scientific Research Institute of Epidemiology and Microbiology, activities, 5023

- Moscow University, geographers, activities, 12662

Moseley, William C., Jr.:

- aerodynamic stability characteristics of Apollo launch escape vehicle, 12925

- Apollo wind tunnel testing program, 2722

- stability characteristics of Apollo command module, 8500

- Moshier, Ronald L., soil survey of Treasure County, Mont., 10089

Mosquitoes:

- culex subgenus *Culex* in New World (Diptera: Culicidae), classification, 6953

- irrigated farms, prevention, 7261

- Moss, Alan L., blast furnaces, steelworks, rolling mills, 17729

- Mossbauer effect, utilized in vibration analysis, 17962

- Mosses, copper mosses as indicators of metal concentrations, 4886

- Mossinghoff, Gerald J., remarks, June 22, 1967, 13048

Mothers:

- assessing feasibility of employment and adequacy of child-care plans, criteria, 13414

- day care and working mother, magnitude of problem on national scale (talk), 11908

- who are the working mothers, 5605, 13188

- working mothers and need for child care services, 10144

Moths:

- genus *Euchromius* Guenee with descriptions of new species (Lepidoptera: Crambidae), review, 5308

- Loxostege Hubner species review and descriptions of new species (Lepidoptera, Pyraustidae: Pyraustinae), 8542

- neotropical agaristine (Lepidoptera: Noctuidae), notes, etc., 5312

- subfamily Prodoxinae (Lepidoptera, Incurvarilidae), revision, 8535

- tympantate, ultrasonic speaker for studies of acoustic sensitivity, 4083

- Zimmerman pine moth, description, control, etc., 11105

- see also Clearwing moths—Euseptis Hubner—Microlepidoptera—Tip moths—Yellow peach moths.

- Motility of bacteria, see Bacteria and bacteriology.

Motion:

- coulomb interaction in momentum space, theory, 11567

- drive system accurately controlled in 1-micron range, 9825F

- strong motion and surface acceleration, Project Handcar, 5782

- upper troposphere, as revealed by satellite-observed cirrus formations, 9430

- see also Equations of motion.

- Motion picture theaters, industry wage survey, 11330

Motion pictures:

- Agriculture Department, bimonthly list, 3058

- air pollution films, on loan for group showing, list, 13075

- aviation education, 9438

Motion pictures—Continued

hold new approach, how a community plans and develops comprehensive mental health center, film announcement, 17138
captioned films for the deaf—
catalog, 7891
program, 10929
catalog of copyright entries, 12435, 17685
civil defense, memorandum to industry, movie, announcement, 10407
employment security, farm labor, unemployment insurance, etc., 12472
Federal Fire Council film library list for safety programs, 14164
films on oceanography, catalog, 2770
Forest Service films available for educational purposes, list, 12569
housing and community development, bibliography, 11204
in search of peace, basic goals of United States foreign policy, 7149
instructional film, research, 9409
July rain, Soviet motion picture reviewed, 16771
Library of Congress catalog, 3506
machine to predict box-office success, USSR study, 11258
medicine and allied sciences, film reference guide, 13073
mental health films, guide, 14636
nursing in coronary care units, films, 11754
Office of Economic Opportunity film guide, 10910
pathfinders from the stars, motion picture covering history and development of methods for determining geographic position, announcement, 16085
professional level (16 mm), AEC catalog, 6300
Public Health Service film catalog, 17045
State Department, film list, 8717
Motion sickness, methionine-pyridoxine and airsickness, observations, 77
Motivation (psychology):
Army research and development personnel, motivational work factors, 4228
Motive power, see Power.
Motor buses, see School buses.
Motor carrier decisions, see Interstate Commerce Commission.
Motor carriers:
census, 1963, motor carrier survey, 4302
class 1 and 2, cost of transporting freight—
Central region, 11232
general commodities by regions or territories, 16726
Middlewest region, 11233
New England region, 9604, 11234
Southwest region, 11235
passenger transportation industries, 1964, compensation expenditures and payroll hours, 17893
passengers, certificates issued in future shall not confer right to special or charter operations—
hearings, 947
law, 508
report, 890
revenues, expenses, other income, etc., of—
class 1 carriers of passengers, quarterly, 3834
large carriers of property, quarterly, 3835
transport statistics, 12657
see also Motor vehicle accidents.
Motor courts, motel employees under fair labor standards act as amended, 7225
Motor cycles, see Motorcycles.
Motor fuel:
aviation handbook, Coordinating Research Council, 1162
highway statistics, 13101
storage tank linings, effects of anti-icing additive, final report, 9991
see also Gasoline.

Motor reactions, arousal as factor in reminiscence, 9981

Motor trucks, see Motortrucks.

Motor vehicle accidents:

Air Force personnel, attempt to predict automobile accidents, 17344
collisions in D.C., report to police, report, 7689
District of Columbia, uninsured motorist coverage required part of liability policies, report, 13644
highways safety study, Operation 66, joint engineering-enforcement, project report, 1594
motor carrier accident investigation reports, 1153, 4927-28, 6476, 11236, 16872-875, 17917
property carriers, 1965-66, operating revenues \$200,000 or more, 16871
traffic safety, Federal role, hearings, appendix, 9315

Motor vehicle operators:

District of Columbia, permits, issuance for less than 3 years, report, 12381
driver, automotive magazine of Air Force, 11949
drivers licenses, statistics, 17176
medical advisory boards for driver licensing, 8638
National Driver Register, State records exchange service, 18087
overtaking and passing on 2-lane rural highway, 14641
revocation or suspension of license to drive while under influence of drugs, etc., amend laws, report, 17623
Motor Vehicle Safety Advisory Council, National, see National Motor Vehicle Safety Advisory Council.

Motor vehicles:

abandonment in U.S. urban areas, 7451
air pollution—
control, determine means of propelling vehicles other than internal combustion engine, hearings, 13856
control, Federal standard, 6324
problems and progress associated with control, hearings, 10871
report of HEW to Congress, 6056, 16348
print as Senate document, report, 6083, 15142
anchorage of seats, Federal standard, 6320
anchorage for seat belt assemblies, Federal standard, 6315
armrests, Federal standard, 6328
ashtrays and lighters, Federal standard, 6327
automotive products industry, trade agreement with Canada, 2924
classification definitions, 18129
code of Federal regulations, 6280
District of Columbia—
registration, facilitate addition of name of spouse of owner—
law, 12178
reports, 12382, 13640
title certificates applications, eliminate oath requirement, report, 12383
emissions, control, progress (address), 2836
energy absorbing steering control system for automotive vehicles, Federal standard, 6318
equipment defects, etc., 1960-66, including correction efforts, hearings, appendix, 9315
Federal item identification guides for supply cataloging, supplements, 3285
forward compartment energy absorption, Federal standard, 6316
fuel tanks and tank filler pipes for automotive vehicles, Federal standard, 4795
glare reduction surfaces, Federal standard, 6323

INDEX 1967

Motor vehicles—Continued
 Government's interagency motor pool system, potential savings obtainable through increased use, Defense Dept., GAO report, 8137
 head restraint requirements, Federal standard, 6330
 highway statistics, 13101
 hydraulic service brake system, Federal standard, 6321
 identification marking of combat and tactical transport vehicles, 12443
 initial Federal motor vehicle safety standards, Jan. 31, 1967, report on development, 9024
 instrument panel instruments and control devices, Federal standard, 6317
 interagency pool, GSA, savings by adopting manufacturers' recommended preventive maintenance programs, GAO report, 16673
 padding for automotive seat backs, Federal standard, 6329
 rear window defogger, Federal standard, 6332
 rearview mirrors for automotive vehicles, Federal standard, 6325
 registered and unregistered, made available for use of Presidential inaugural committee, issue special registration tags, valid for 90 days, report, 7686
 rigging Air Force communication control vehicles for airdrop, Army technical manual, 1771, 7398
 roll bar structure for automotive vehicles, Federal standard, 6333
 safety defect recall campaigns reported by manufacturers, 18086
 safety door latches and hinges, Federal standard, 6319
 safety responsibility act of District of Columbia, as amended, amend, report, 17623
 safety standards—
 application to those produced in quantities less than 500, hearing, 17647
 establish, report, 645
 side marker devices, Federal standard, 6331
 standard safety devices, Federal standard, 4796
 Tariff Commission report to Automotive Agreement Adjustment Assistance Board in case pertaining to Maremont Corporation, 5565
 tariff elimination agreement with Canada, implementation, annual report, 7803
 tracked combat vehicles, military procurement—
 appropriations, 1967, report, 2014
 appropriations, 1967, supplemental—
 hearings, 6031, 7799
 law, 9035
 reports, 6087, 7665, 7667, 7673
 appropriations, 1968—
 hearings, 7797, 9149
 law, 12164
 reports, 7786, 10370, 10375, 10611
 treatment, painting, etc., military standard, 4678
 used tires, rebuilding by civil agencies, GAO review, 14162
 utilization in Cape Kennedy interagency motor pool, GSA and NASA, GAO report, 2353
 window and door controls, Federal standard, 6326
 windshield wipers and washers, Federal standard, 6322
 world production and registration, 8926
see also Electric vehicles.
 Motorboats, Coast Guard Auxiliary examination program, courtesy examiners handbook, 5947

Motorbuses:
 charter rights, grant of regular route authority does not confer right to engage in special or charter operations—
 hearings, 947
 law, 508
 report, 890
 District of Columbia, reduced fare for schoolchildren, raise age limit, report, 16380
 interstate, proration compact, Massachusetts, consent of Congress, law, 440
 Motorcycles:
 Federal item identification guides for supply cataloging, supplements, 3285
 United States, popularity, accidents, injury control, 5448
 your motorcycling fun and personal protection, 17174
 Motorists, highway safety study, Operation 66, joint engineering-enforcement project report, 1594
 Motors:
 hysteresis synchronous, circuit increases capability, 11440
 motors and generators, current industrial reports, 4333, 17432
 nutator actuator, use of fluid logic control circuit to operate, 6759
 simple drive system operates heavy hinged door, 8404
 spring, weight and animal-powered, classification definitions, 18130
see also Electric motors.
 Motortruck drivers, transporting ammunition, explosives, and dangerous articles, driver's handbook, 7009
 Motortrucks:
 electric, evaluation, 9770
 industry report, monthly, 3588
 refrigerated truck, bodies, testing and rating method, 17335
see also Firefighting vehicles.
 Motortrucks in freight service, air-truck coordination and competition, 11231
 Mott, John R., soil survey of Franklin County, Mass., 8696
 Mota, H. T., intense neutron sources, proceedings of seminar, 13315
 Moulds, Donald E., lead, 2545, 5107
 Mount, *see* name of mountain, except when "Mount" occurs as first word of name of town, etc.
 Mount Hermon School, East Northfield, Mass., carillon, duty-free entry, 7650, 16353
 Mount Holyoke College, polarimeter, duty-free entry, 13775
 Mount Rainier National Park, general information, 5319
 Mount Rogers National Recreation Area, establish, report, 2085
 Mountain Fuel Supply Co., oil and gas lease, reinstate, report, 10738
 Mountain pine beetles, *see* Beetles.
 Mountainmahogany, birchleaf, use of helicopter-applied herbicides to control, 14111
 Mountains, flying helicopters over at night, guidance systems tested, 8089
see also Seamounts.
 Mounting bases, mount, film slide, photographic, overhead projector, Federal standard, 16604
 Mourino de Moya, Ena H., relief, 9237
 Mourning doves, hunting, possession, transportation, importation in Alaska, Federal regulations governing, 14061
 Mouth:
 bacteriologic evaluation, man in oxygen-helium atmosphere, 84
 oral cancer, early detection using exfoliative cytology, training course summary, 18161
 oral diseases, brief review of research studies, 18173

Mouth—Continued
pyorrhea and other gum diseases, research explores, 2819
Movement (psychology):
control of movements in man, USSR study, 12690
Moving, see Transportation.
Mower, R. W., causes of fluctuations in rate of discharge of Clear Lake Springs, Millard County, Utah, 12618
Mowing understory vegetation in young teak plantation, 12574
Moya, Ena H. Mourino de, see Mourino de Moya, Ena H.
Moye, Robert, accident, 11238
Moyer, Elbert L., Jr., controlling off-site hardwoods with 2, 4-D amine concentrate, 12533
Moyer, Elsie Z., basic data on metabolic patterns in 7- to 10-year old girls in selected Southern States, 13227
Moyer, Forrest T.:
employment and injuries in—
fuel industries, 2536
metal and nonmetal industries, 8338
mineral industries, 2537
injury experience in—
metallic mineral industries, 11355
nonmetallic mineral industries, 9756
Moyer, James E., study of man in oxygen-helium atmosphere, oral, cutaneous and aerosol bacteriologic evaluation, 84
Mozambique, see Portuguese East Africa.
MRA, see Model Reporting Area for Blindness Statistics.
MS-222, fish control investigations, 8033
MSI series, 3032, 3862-63
MTMTS, see Military Traffic Management and Terminal Service.
Messag, Siegfried, geology of Republic quadrangle and part of Aeneas quadrangle, Ferry County, Wash., 16682
Mueller, L. J. Patrick, stratigraphy of Keku Islets and neighboring parts of Kulu and Kupreanof Islands, southeastern Alaska, 12600
Muhlenbergia, Gramineae, subgenus Podosemum and section Epicampes, taxonomic study, 17047
Muhlenhaupt, R. C., single-engine Claude cycle as 4.2°K refrigerator, 14517
Muir Woods National Monument, general information, 11617
Mule Creek Oil Co., Inc., relief, 783
Mullet Key:
engineer report—
departmental edition, 2214
document edition, 2007
Mullin, Sylvia R., progressive fish-culturist, 3778
Mullins, Cecil J.:
attempt to predict automobile accidents among Air Force personnel, 17344
prediction of success in instructional programmer school, 17345
Mullins, Richard H., establishing business in Peru, 231
Multifocal premature contractions, ECG finding of grave significance, 15897
Multiple sclerosis:
nature, causes, treatment, etc., hope through research, 18166
progress in research, 18179
Multiplexer uses insulated gate-field effect transistors, 18001
Multiplexing, control device for handling wide variations in sampling rates, 12887
Multipliers, see Lagrange multipliers.
Multivariable analysis of mechanics of penetration of high speed particles, 6708
Multivariable processes, see Statistical processes.
Mumford, Bessie C., list of intercepted plant pests, 7250
Mundorf, M. J., ground water in vicinity of American Falls Reservoir, Idaho, 17832

Munford, James A., embedment and other metallurgical and mechanical characteristics of cross-wire resistance welds, 2695
Munitions:
arms sales and foreign policy, study, 6098
United States armament and disarmament problems, hearings, 10836
Muniz y Sotolongo, Julio C., relief, 260
Munoz, Federico de la Cruz, see Cruz-Munoz, Federico de la.
Muravin, L. D., Soviet sculptor, transcript of conversation on Chinese artists, traditions, and cultural revolution and Red Cross, 4948
Murchison, Roderick G., mineral industry of Ghana, 8349
Murine leukemia, see Leukemia.
Murphree, L. C., soil survey of Monroe County, Miss., 5518
Murphy, Charles S.:
addresses, etc.—
Nov. 14, 1966, 1900
Apr. 17, 1967, 8973
Apr. 30, 1967, 8968
June 21, 1967, 12096
Sept. 29, 1967, 16049
Murphy, Edward J., rapid colorimetric method for field determination of nitrogen dioxide in fumes from explosives, 14338
Murphy, J. D., aerodynamic heating data for afterbody Project Mercury spacecraft, 14372
Murphy, James L., fuel weight and removal costs in fuel-break construction, 8082
Murphy, Louis J., basic data on economy of Venezuela, 5954
Murphy, Richard J.:
remarks, etc.—
July 12, 1967, 14611
July 17, 1967, 13057
Murphy, Robert T.:
addresses, etc.—
Nov. 3, 1966, 189
Nov. 5, 1966, 186
Nov. 10, 1966, 1899
Jan. 20, 1967, 4368
Feb. 24, 1967, 5911
Mar. 29, 1967, 7523
July 14, 1967, 13420
Oct. 11, 1967, 17446
Oct. 13, 1967, 17443
Murphy, Thomas E.:
control structure, Little Sioux River, Iowa, hydraulic model investigation, 7931
drop structure for Gering Valley project, Scottsbluff County, Nebr., 6213
Willow Springs and Sag Junction diversions, Chicago Sanitary and Ship Canal, Illinois, 10962
Murray, J. P., tumors of alimentary tract in Africans, 14632
Murtagh, T. B., analysis of sextant navigation measurements during lunar module rendezvous, 6903
Muscidae, see Flies.
Muscles:
biochemistry, Soviet research, 14214
denervated, luminescent-microscopic study, USSR, 14251
man's, electromechanical model and its use in programmed teaching, USSR study, 2468
muscular exercises and intermittent venous occlusion, possible preventive effects on cardiovascular deconditioning after bed recumbency, study, 8408
myofibrils, USSR studies on microlocalization of potassium, 14217
photoactivation of smooth muscle with ruby laser, 17362
photodiffusion in muscle cells, under effect of local and irradiating excitation, USSR study, 14259

INDEX 1967

Muscles—Continued
skeletal, functional role of protein sub-fractions in myofibrillary proteins, USSR study, 14228
vital staining of muscle tissue during excitation, USSR study, 14255
Muscovite, mica-muscovite, temperature dependence of dielectric constant, at varying frequencies, USSR study, 16737
Musen, Peter:
application of Krylov-Bogolubov method to solution of stellar 3-body problem, 2695
modifications in Brouwer's theory of general perturbations in rectangular coordinates, 2703
numerical theory of satellites in Brendel's coordinates, 11545
Museum of Art, Science, and Industry, Bridgeport, Conn., planetarium, elementary school class visit, 5278
Museums:
come alive with films, banjos, etc., 9402
cooperative assistance from National Museum, authorize—
law, 392
report, 681
marine in United States, 16843
robots serve as guides, USSR studies, 17867
see also names of museums or places where located.
Musgrave, John R., purification and crystallization of amorphous boron powder recovery and purification of boron from residues and scrap, 12017
Mushrooms, growing in United States, 1687
Music:
catalog of copyright entries, 967, 16452
sonata for 2 clarinets, student composers take over, 7911
Musical instruments, Federal item identification guides for supply cataloging, supplements, 3292
see also Clarinets.
Musical pitch, masked DL for pitch memory, 11348
Muskegon, Mich., area wage survey, 14292
Muskegon Heights, Mich., area wage survey, 14292
Muskmelons, pickleworm control, 4116
Muskogean charm songs among Oklahoma Cherokees, 6973
Muslim, see Mohammedanism.
Mussels, certified shippers, list, 3089
Mutation, see Variation (biology).
Mutton, slaughtering, cutting, and processing on farm, 1690
Mutual aid, see Military aid.
Mutual assistance, see Military aid.
Mutual defense, see Military aid.
Mutual defense assistance control act of 1951, see Exports.
Mutual fire insurance companies, see Fire insurance.
Mutual security, see Military aid.
My generation's finest achievement (address), 7902
Mycoplasma:
indirect hemagglutination test for Mycoplasma pneumoniae employing commercially available antigen and adapted to microtiter technic, 5754
relationship to rheumatoid arthritis and related diseases, proceedings, conference, 2833
Myers, Clifford A.:
height-diameter curves for tree species subject to stagnation, 2311
yield tables for managed stands of lodgepole pine in Colorado and Wyoming, 11140
Myers, Donald A., Fusulinidae from Graptford formation and Winchell limestone, Canyon group, Upper Pennsylvanian, in Brown County, Tex., 12615

Myers, Lowell J., law and the deaf, 17183
Myers, Robert J.:
comparison of actual experience under OASDHI system with short-range cost estimates, 7117, 14644
comparison of recent projections of United States population, 11792
history of cost estimates for hospital insurance, 10082
long-range cost estimates for old-age, survivors, and disability insurance system, 7118
relationship of child beneficiaries to old-age beneficiaries, 1603
Myers, Vance A., infrared radiation from air to underlying surface, 2972
Mylar:
charge storage effects from electron irradiation, 2610
film eliminates silk screening of equipment panels, 1454
Myocardial ischemia, see Heart diseases.
Myodocopa, see Crustaceans.
Myofibrils, see Muscles.
Myopathy, microelement metabolism in myopathy patients, USSR study, 2447
Mystic Shrine, see Ancient Arabic Order of Nobles of Mystic Shrine.
N
N.A.S.A., see National Aeronautics and Space Administration.
N.A.T.O., see North Atlantic Treaty Organization.
N.B.S., see National Bureau of Standards.
N-body problems, computer simulation of plasma and many-body problems, symposium, 16928
N.I.H., see National Institutes of Health.
N.L.R.B., see National Labor Relations Board.
N.P.I.P., see Poultry.
N.R.A.B., see National Railroad Adjustment Board.
N.R.L., see Naval Research Laboratory.
Nabo y Pividal, Rafael J., relief, 12153
Nabokoff, Katherine, relief, 287, 843
Nabrit, Samuel M.:
remarks—
Feb. 2, 1967, 4242
Mar. 30, 1967, 7435
Apr. 28, 1967, 8917
June 14, 1967, 12020
July 3, 1967, 12025
Nace, Raymond L., are we running out of water?, 6396
Nacelles, aft-fuselage-mounted, effects on subsonic longitudinal aerodynamic characteristics on twin-turbojet airplane, 2730
Naceth, Rodger L., low-speed wind-tunnel investigation of tension-structure parawings, 14454
Naftalin, Mortimer L., historic books and manuscripts concerning general agriculture in collection of National Agricultural Library, 8515
Nagle, P. J., simultaneous measurements of intra-aortic and auscultatory blood pressures, etc., 4254
Nahal, L.:
mineral industry of—
Federal Republic of Germany, 12801
France, 16858
regional mineral industry review of Europe, 15473
Nahas, Gabriel A., and wife, relief, 569
Nalditch, S., research on role of ligand molecules on ionization potentials, 9588
Nakamura, Eugene L., abundance and distribution of zooplankton in Hawaiian waters, 14064
Nakano, Akemi, see Duke, Noriko S.

Nalty, Bernard C.:
 Marines on Iwo Jima, battle and flag raising, 14311
 United States marines at Harper's Ferry and in Civil War, 12784
 Names (personal):
 census records, your name is somewhere, 10400
 index medicus, cumulated, 6940
 Namkoong, David, photographic study of condensing mercury flow in 0- and 1-G environments, 12939
 Nanne, Louis V., relief, 7626, 12348, 13475
 Nanostomina, see Characidae
 Nanosecond amplifiers, see Amplifiers
 Napolitano, A., viscosity of standard lead-silica glass, 1520
 Naqib, K. M. Al, geology of Arabian Peninsula, southwestern Iraq, 6407
 Narcotic addicts, rehabilitation, report, 13175
 Narcotic habit:
 narcotic addict rehabilitation act of 1966—
 hearings, 2128
 law, 497
 report, 2013
 prevention and control of narcotic addiction, 6693
 Narcotics:
 and drug abuse, annotations and consultants' papers, 13067
 convention on narcotic drugs, 1961—
 message from the President, 7771
 report, 9190
 text, 17235
 customs decisions, weekly report, 3977
 traffic, 17918
 Narrow, Bernard G., generalized satellite telemetry data simulation program, 1508
 NASA, see National Aeronautics and Space Administration
 NASA BITS, brief ideas, thoughts, suggestions, 16889
 NASA EP series, 9821, 11423, 12877, 17948
 NASA facts, 1437-38, 8430-31, 9822, 12878, 16922-925, 17949-950
 NASA Scientific and Technical Information Facility computer-oriented information service in science and technology of aerospace, 8432
 NASA SP series, 1439-43, 2615-21, 5189-98, 6730-39, 8433-45, 9823-25, 11424-434, 12879-884, 14402-408, 15514-520, 16928-935, 17951
 list, 5199, 11435
 NASA tech briefs, 1444-72, 2622-81, 5200-27, 6740-6850, 8446-79, 9825A-63, 11436-484, 12885-918, 14409-146, 15523-553, 16936-969, 17934-18007
 indexes, 11427, 16931
 NASA, 20th century explorer into sea of space, guide to careers in aero-space technology, 11574
 Nashville, Tenn., housing and urban renewal in metropolitan area, report, 12099
 Nassau County, N.Y., northeastern, geology and hydrology, 4894
 Natality, see Births
 Natchez Trace Parkway, general information, 2757
 Nation building and peace building, 14209
 Nation of amateurs, 9403
 National Academy of Sciences:
 Federal research and development program, decision-making process, comments by, report, 15001
 report, 1963
 departmental edition, 6694
 document edition, 6051
 report, 1964—
 departmental edition, 16876
 document edition, 16347
 Special Panel on Applied Science and Technological Progress, report, 16342
 print additional copies, report, 16263
 hearing, 15049

National Advisory Board Council, proceedings, 27th annual meeting, 12778
 National Advisory Cancer Council, report, 2835
 National Advisory Commission on Civil Disorders, witnesses summoned by compulsory attendance, testimony, and production of evidence, law, 13341
 National Advisory Commission on Food and Fiber:
 appropriations, 1968—
 hearings, 10629, 12397
 law, 17558
 reports, 10620, 13815
 report, 13063
 technical papers, 15666, 17122-124, 18144
 National Advisory Commission on Rural Poverty:
 appropriations, 1968, hearings, 10629, 12397
 hearings on rural poverty—
 Memphis, Tenn., 17126
 Tucson, Ariz., 15663
 Washington, D.C., 17127
 National Advisory Commission on Selective Service, report, 7045
 National Advisory Committee (agriculture):
 annual instead of quarterly meetings, provide, report, 2020
 National Advisory Committee on Self-Help:
 establish—
 hearings, 13861
 message from the President, 6000
 National Advisory Council on Education Professions Development:
 establish—
 law, 12176
 reports, 12275, 13643, 13805
 National Advisory Council on Extension and Continuing Education, annual report, 10508
 National Advisory Council on International Monetary and Financial Policies:
 annual report, 12200
 increase in resources of inter-American Development Bank, etc., report, 13552
 National Advisory Health Council, Allied Health Professions Education Subcommittee, report, 14622
 National Aeronautics and Space Administration:
 AEC-NASA liquid metals information meeting, 125
 AEC-NASA tech briefs, 5130-56, 6695-6704, 8384-8404, 9793-98, 11390-392, 12832-845, 14363-369, 15485-494, 16877-887, 17919-932
 Aerobee sounding rocket launchings for 1964, compendium, 15554
 appropriations, 1968—
 amendments, 7600
 hearings, 9145, 15017, 16392
 reports, 14978, 17576, 17580
 appropriations, 1968, authorization—
 hearings, 10677, 10797
 index, 13714
 law, 14911
 reports, 10622, 12277, 12390, 14946
 bidding, etc., costs charged to government contracts, GAO review, 8143
 biomedical application teams, 15495
 careers in aero-space technology, guide, 1909, 11574
 contractor accounting systems, guidelines for evaluation, 6708
 contractor report CR (series), 1419-36, 2595-2613, 5157-58, 6706-28, 8405-29, 9799-9820, 11396-422, 12847-876, 14371-401, 15497-512, 16890-920, 17933-947
 contributions to—
 advanced valve technology, 15518
 metals joining, 6738
 structural design concepts, 16932
 use of plasma jet technology in chemical processing, 12867

INDEX 1967

National Aeronautics and Space Administration—Continued
 cost information from contractors, procedures for reporting, 9929
 EP series, 9821, 11423, 12877, 17948
 headquarters telephone directory, 16926
 Inventions and Contributions Board petitions for patent waiver, findings of fact, etc., 2731, 3684, 15177
 management intern program, 6729
 motor vehicle utilization in Cape Kennedy interagency motor pool, GAO report, 2353
 NASA BITS, brief ideas, thoughts, suggestions, 16889
 NASA cost plus award for contracting guide, 16888
 NASA facts, 1437-38, 8430-31, 9822, 12878, 16922-925, 17949-950
 NASA incentive contracting guide, 16927
 NASA management issuances—
 index, 11395, 15496
 table of contents, 15513
 NASA-University Conference on Manual Control, proceedings, 6733
 NASA Western University Conference, summary report, 2616
 NASA zero power reactor (ZPR-1), transport study of real and adjoint flux, 11535
 patent policies, evaluation, 6043
 positions in aerospace technology, 7536
 potential savings through use of civil service employees rather than contractor-furnished employees for certain support services, GAO report, 11150
 preparing contractor reports for NASA data presentation, 1443
 press releases, 3745
 procurement directive, 3591
 procurement regulations, 3592, 18058
 supplement, 18058
 publications—
 educational, lists, 2614, 16921
 price list, 5419
 reliability programs, evaluation, 8442
 report of Apollo 204 Review Board to Administrator, 9931, 17020
 research on noise-abatement approach profiles for multiengines jet transport aircraft, 12956
 scientific and technical reports for 1966, selected listing, 12884
 semiannual report—
 departmental edition, 11580
 document edition, 10518
 SP series, 1439-43, 2615-21, 5189-98, 6730-39, 8432-45, 9823-25, 11424-434, 12879-884, 14402-408, 15514-520, 16928-935, 17951
 lists, 5199, 11435
 space flight investigations, opportunities for participation, 11576, 17018-19
 space science and applications programs—
 report to Space Science Board, 2732
 statement, 12877
 special publications, list, 5199, 11435
 specifications and standards, 15520
 standard procedures for microbiological examination of space hardware, 15521
 standards for clean rooms and work stations for microbially controlled environment, 15522
 support service contracts, use of civil service employees rather than contractor-furnished employees, hearing, 16330
 tech briefs, 1444-72, 2622-81, 5200-27, 6740-6850, 8446-79, 9825A-63, 11436-484, 12885-918, 14409-446, 15523-553, 16926-969, 17954-18007
 indexes, 11427, 16931
 technical memorandum, 2682
 technical notes, 1473-1514, 2683-2730, 5228-75, 6851-6907, 8480-8506, 9871-9918, 11485-555, 12919-967, 14447-497, 15554-581, 16970-17011, 18008-53

National Aeronautics and Space Administration—Continued
 technical reports, 1515, 6908-10, 8507-8, 9919, 11556-559, 12968-971, 14498-499, 17012-16, 18054-56
 technical translations, 5276-77, 6911-12, 8509-12, 9920-28, 11560-573, 12972-978, 14500-504, 15582, 17017, 18057
 technology dissemination program, channels of acquisition in commercial firms, 14375
 technology utilization program, new technology reporting—
 management guidelines, 1418
 reportable items, 5279
 transportation problems, rockets, etc., 9932
 Zero Power Reactor I, measurement of effective delayed neutron fraction, 2694
National Aeronautics and Space Council, appropriations, 1968, hearings, 9145, 15147
National Agriculture Library:
 agricultural/biological vocabulary—
 alphabetical list, 17026
 categorized list, 17025
 appropriations, 1968, hearings, 10629, 12397
 books on cooperatives, general reading list, 12977
 historic books and manuscripts concerning general agriculture in collection, 8515
 library list (series), 1517, 8515, 14505
 services offered, 5282
National Agricultural Weather Service, Federal plan, 6226
National and Regional Export Expansion Councils, directory, 16099
National Arboretum, general information, 4128
National Archives and Records Service:
 genealogical records, 17027
 microfilm publications—
 list, supplement, 17030
 pamphlet accompanying, 18060-72
 preliminary inventories series, 14506-510, 18074
 publications, list, 15583
 record groups in National Archives and Federal record centers, list, 17029
 special lists, 14511-512
National Association of Manufacturers, campaign for fuller utilization of handicapped (address), 8616A
National banks:
 authority to underwrite and deal in securities issued by State and local governments, hearings, 16396
 foreign activities, Federal reserve regulation, 8004
 see also for individual banks, name of place where located or name of bank.
National Bison Range, general information, 15259
National blueprint for public welfare, 4897
National Brotherhood Week, human relationships, problems of nations living together, etc. (remarks), 8283
National Brucellosis Committee, proceedings of annual meeting, 15830
National Bureau of Standards:
 applied mathematics series, 14513
 calibration and test services, inserts, 8518, 9937-39, 12980, 15585-587, 17032
 dedication of new laboratories (remarks), 1957
 general information, 2738
 handbooks, 6914-15
 journal of research, 2736, 3458-60
 laboratories, Boulder, Colo., general information, 16097
 laboratories open for dedication, inspection tour, 2740
 miscellaneous publications, 1519-21, 2737-38, 6917, 8518-21, 9936-41, 11582-583, 12979-983, 15585-590, 17032-34, 18076

National Bureau of Standards—Continued
monographs, 1522, 2739, 5284, 8522-23,
9942, 11584, 12984-985, 14514-516,
15561-592
national standard reference data series,
1523, 8524, 17035-36, 18077
organic act, amend—
hearings, 10825, 13715
reports, 14934, 15103, 16257
publications, list, 9936
publications newsletter, 3617
Radiation Physics Laboratory, general in-
formation, 2741
research and development, review of Gov-
ernment reports, 2742
standard frequency and time services pro-
vided by radio stations WWV, WWVH,
WWVB, and WWVL, 12979
standard reference materials—
catalog and price list, 17033
quarterly insert sheets, 1519, 11582
general information, 11585
homogeneity characterization of spectro-
metric standards for white cast iron
and stainless steel powder compact,
2737
new materials, publications, etc., 11588
news for users, 12987
technical highlights, annual reports, 9943,
18079
technical news bulletin, 3931
technical news, press release, 3932
technical notes, 1525-26, 2743-46, 5288-
93, 6921-24, 8526-27, 9944-45, 11589-
592, 12989, 14517-519, 17038-42, 18080-
83
technical publications, 1527
National Cancer Institute:
clinical, research, and staff associate, in-
formational bulletin, 7073
monographs, 1583, 7074-75, 14632, 18172
Pathologic Anatomy Branch, histopathol-
ogy laboratory procedures, 15689
research and related programs, 7089
research reports, 15708
National Capital, *see* Capital of United
States
National Capital Planning Commission:
appropriations, 1968—
hearings, 7734, 9302
law, 12170
reports, 10560, 10766
National Capital Regional Planning Coun-
cil:
annual report, 1528
regional development guide, 8530
National Capital Transportation Agency:
annual report, 5295A
appropriations, 1968—
hearings, 7734, 9302
law, 12170
report, 10766
chronology, 6925
publications, list, 6926
transfer functions—
hearing, 2132
law, 478
report, 654
National CARIH Asthma Week:
designate—
law, 9034
report, 7776
National Center for Air Pollution Control,
training program, July 1967-June 1968
bulletin of courses, 18153
National Center for Atmospheric Research,
administration of contract by NSF, op-
portunities for improvement, GAO report,
16671
National Center for Deaf-Blind Youths and
Adults:
establishment and operation—
hearings, 15172, 17600
law, 16144

National Center for Deaf-Blind Youths and
Adults—Continued
establishment and operation—continued
reports, 14972, 16366
6 steps forward, 17186
National Center for Health Statistics:
life tables, 1959-61, data, bound volumes,
5444-45
organization and functions, 11748
public health conference on records and
statistics, proceedings, 11th national
meeting, 18185
training unit for nosologists, description
of diseases, 8656
National Center for Radiological Health,
training and manpower program, bulletin
of courses, 13085
National Clearinghouse for Mental Health
Information:
crime and delinquency abstracts (periodi-
cal), 3163
occupational mental health notes, 17154
National Clearinghouse for Poison Control
Centers, bulletins, 3593
National Clearinghouse for Smoking and
Health:
directory of on-going research in smoking
and health, 11743
library services, 11740
National Coal Week, designate, report, 9288
National Coin Week, designate, report, 10774
National Collection of Fine Arts:
art of Stanton Macdonald-Wright, retro-
spective exhibition, 11595
general information, 5296
National Collegiate Athletic Association, con-
troversy with AAU, status, hearing, 17646
National Commission on Consumer Interests,
create, hearings, 17594
National Commission on Fire Control and
Prevention, establish, reports, 14934,
15103, 16257
National Commission on Food Marketing,
technical study series, 5297-98, 9947
National Commission on Product Safety:
establish—
hearings, 7802, 15041
report, 10758
National Commission on Public Management,
establish, hearings, 10869
National Commission on Reform of Federal
Criminal Laws:
establish—
law, 505
report, 930
National Commission on Urban Problems, re-
port, extend time for filing, report, 16367
National Committee for Clear Air Turbulence,
report, 2226
National Community Senior Service Corps:
provide—
hearings, 17669
report, 914
National Conference of Standards Labora-
tories, proceedings, 12983
National Conference of State Societies, Wash-
ington, D.C., name, report, 9132
National Conference on Air Pollution:
clean air for your community, 11722
communicator, information release, 3594
control now for clean air, proceedings,
summary, 14620
proceedings, 13704
National Conference on Crime Control, pro-
ceedings, 16788
National Conference on Legal Rights of
Tenants, report, 14277
National Conference on Medical Costs, chart
book, 14185
National Conference on State Technical Ser-
vices, addresses and discussions, 12131
National Conference on Weights and Meas-
ures:
announcement, 9934
annual report, 11583

INDEX 1967

National Conference on Wheat Utilization Research, 4th, papers, 6
 National Congestive Heart Failure Seminar, report and recommendations, 8646
 National Congress on Stomatology, Rumania, proceedings, 12732
 National Consultants Associated, Ltd.: labor racketeering activities—
 hearings, 2119
 report, 10731
 National Council on Marine Resources and Engineering Development:
 annual report, 9948
 appropriations, 1968—
 hearings, 7734, 9302
 law, 12170
 reports, 10560, 10766
 National Council on the Arts:
 appropriations, 1968, hearings, 7734
 review of programs and planning, 6928
 scope and exposure of initial programs, review, 6929
 National Crime Commission, *see* President's Commission on Law Enforcement and Administration of Justice.
 National Data Center:
 establish, proposal—
 hearings, print additional copies, report, 10756
 problems of privacy, hearings, 10856
 National debt, *see* Public debt.
 National defense:
 agreement with—
 Brazil, 11854
 Canada, 7155, 8728, 17230, 7249
 France, 5550-51, 7168-69
 Great Britain, 11846
 Mali, 11873
 New Zealand, 15771
 Peru, 2930
 Philippines, 2915
 Saudi Arabia, 2926
 chemical, biological, and nuclear defense, Army field manual, 1758
 civilian aides to Secretary of Army, 13th national conference, summary, 15944
 code of Federal regulations, 6286, 9470-74, 9487, 11041-42, 12526
 defense industry bulletin (periodical), 3193
 defense materials systems and priorities, questions and answers, 7452
 defense systems resources in civil sector, evolving approach, uncertain market, 17371
 education act of 1958—
 administration of programs under title 3, notes and working papers, 17668
 amend, hearings, 15026, 15170, 16321
 counseling and guidance institutes, programs, 6189
 financial assistance for science, etc., instruction, guidelines, 13956
 graduate fellowship program for pre-doctoral study, 2187
 graduate fellowships, 1967-68 graduate programs, 4715
 institutes for advanced study—
 preparing proposals, manual, 9401
 summer 1967, handbook for directors, 1003
 loans to nonprofit private elementary and secondary schools for equipment and materials, 1007
 modern foreign language program, 7905
 student loan program, college work-study program and list of participating institutions, 1901
 international defense commitments of U.S. (statement), 1628
 joint defense space research facility, agreement with Australia, 7189
 mobilization programs of—
 Business and Defense Services Administration, hearings, 13543

National defense—Continued
 mobilization programs of—continued
 Emergency Planning Office, hearing, 12185
 General Services Administration, hearing, 12186
 Interior Department, hearing, 14916
 mobilization report, 2036
 perspectives in defense management (periodical), 12658
 preparedness program, investigation, reports of subcommittee, 2105-7, 4629, 10809-815
 program, 1968-72 and 1968 budget, statement, 4527
 transportation, monograph, Industrial College of Armed Forces, 16731
 worldwide military commitments, hearings, 944, 10516
 see also Civilian defense—National security.
 National defense education act, *see* Education.
 National Driver Register, State driver records exchange service, 18087
 National Economic Goal Commission, establish, hearings, 2133
 National economy, *see* Economic conditions.
 National electric rate books, 1050-57, 2248-53, 3595, 4772-75, 6264, 9457-58, 11018-21, 12510-512, 14027-29, 15245-246, 16582-685
 National Elk Refuge, general information, 8028
 National emergency standby regulations and instructions, personnel and manpower, FPM supplement, 3306
 National Employ the Handicapped Week, designate, report, 10776
 National Employ the Physically Handicapped Week, law establishing, amend, report, 10776
 National Endowment for the Arts, review of programs and planning, 6928
 National Endowment for the Humanities:
 annual report, 6931
 appropriations, 1968, hearings, 7734
 initial programs, 6932
 1968 program information, 12991
 National Environmental Satellite Center, ESSA technical report, NESC series, 9430, 10967
 National Export Expansion Council:
 Action Committee on Export Promotion, report, 7564
 Action Committee on Taxation, recommendations, status report 3021
 Action Committee on Trade and Investment in Developing Countries, report, 9026
 directory, 16099
 National Farm Safety Week, July 23-29, 1967, keep your sights on safety, safe use of firearms, facts, 10187
 National Farmers Week, designate, report, 10772
 National Fire-Weather Service, Federal plan, 9432
 National flags and ensigns, 14569
 National flood insurance:
 act of 1967—
 hearings, 12400, 16315
 reports, 15132, 17572, 17574
 National food buyers quiz, questions and answers, 963
 National Forest Reservation Commission:
 annual report, 13722
 print as Senate document, report, 13818
 National forests:
 America's playgrounds, skiing, 5667
 California—
 areas of limited public use, 16651
 forest recreation sites, accidents caused by hazardous trees, 11125
 recreation facilities development, personal history, 17799

National forests—Continued
code of Federal regulations, 9476
enjoy your national forests, announce-
ment and order form, 11710
Federal management has contributed much
to strengthening local government and
economics (statement), 13246
Intermountain region—
ski areas, America's winter playground,
6372
yearbook, national forests in profile,
15280
land exchange in system, 17329
land exchanges, accept cash equalization,
report, 2084
management policy and other problems,
hearings, 10628, 15010
Minnesota, private pleasure boating, 8068
national forests are for people, you have
stake in conservation, 1087
Pacific Northwest, 1966, multiple use high-
lights, 15279
protecting national forest resources, 16651
recreation use estimation on Forest Ser-
vice lands in United States, 15284
State and privately-owned land protection
within area, 4861
stumpage prices for sawtimber sold (pe-
riodical), 5909
summer home permits terminated, com-
pensation to permittee, hearing, 17586
system, areas as of June 30, 1966, 6364
timber sale accomplishments, 9531
timber sale, story, 15868
vacations, 11107
wilderness, America's playgrounds, 8838
see also Forests and forestry—Timber—
also names of forests.
National Foundation for Social Sciences,
establish, hearings, 10846
National Foundation on the Arts and the
Humanities:
act of 1965—
amend, hearings, 17599, 17663
preparing proposals, manual, 9401
appropriations, 1968—
hearings, 9302
law, 12170
reports, 10560, 10766, 12252
purpose and activities as it pertains to the
arts, 6927
National Gallery of Art:
appropriations, 1968, hearings, 7734
brief guide, 14521
National Grange, 5-cent commemorative
postage stamp (poster), 8611
National Guard:
air, general officers, list, 6933
air reservist (periodical), 3011
Army—
and Air civilian in peace, soldier in war,
bibliographic survey, 5732
field training, administrative instruc-
tions, 8531
general officers, list, 6933
installations and facilities program, op-
erating procedures, 6935
military publications, administrative
guidance, 11596
register, 11598
Special Forces units, operational funds,
pamphlet, 5299
technician program, job descriptions,
pamphlet, change, 11597
deceased members, furnishing uniform and
presentation of flag, report, 16229
job rights, key answers for employers, etc.,
14714
technicians, clarify status—
hearings, 6030, 17640
reports, 658, 6012
trophies—
Eisenhower trophy to outstanding unit
of company size, announcement of
winners, pamphlet, 14523

National Guard—Continued
trophies—continued
National Guard trophy, Pershing trophy,
National Guard (State) trophy, an-
nouncement of winners, 14522
National Guard Association of United States,
trophy, announcement of winners, 14522
National Guard Bureau, pamphlets, 5299,
6934-35, 8531, 11596-597, 14522-23
National health survey, vital and health sta-
tistics, 5467-70, 7098, 8660-61, 10067-
69, 11763-764, 13099, 14637-639, 15715,
17168-170, 18188-189
National Heart Institute, research grants,
congenital heart disease, 15677
National Herbarium, contributions from,
12997, 14532, 15601, 17047-49
National Highway Safety Advisory Commit-
tee:
establish, report, 646
increase size, etc., report, 16377
National Highway Safety Agency:
administrator, William Haddon, jr., hear-
ing, 6095
establish, report, 646
National Highway Safety Bureau:
director, nomination of William Haddon,
jr., hearing, 15153
establish—
law, 380
report, 906
National Historical Publications Commis-
sion, microfilm publications, catalog, 6936
National Home-Improvement Month, desig-
nate, report, 10777
National housing act, see Housing—Loans.
National income and product, accounts of
United States, 1929-65, statistical tables,
1829
National Institute of Allergy and Infectious
Diseases, role of collaborative research
program, 8649
National Institute of Child Health and Hu-
man Development:
research and training programs, 5462
training support, 13194
National Institute of Dental Research:
brief review of research studies, 18173
spectrum of dental research, 18187
National Institute of Mental Health:
appropriations, 1968, hearings, 10631
grants and awards for graduate and under-
graduate training, 7066
mental health manpower, current statis-
tical and activities report, 2829
research grants—awards
listing by State, 1948-63, etc., 13083
program, 1965, descriptive data source-
book, 15707
support programs, 18174
training grants—
for support of mental health personnel,
current status, 2839
program, 1965, statistical sourcebook,
7076
workshop series of Pharmacology Section,
17173
National Institute of Neurological Diseases
and Blindness:
eye research, 8631
neurological information network, 15699
research profiles, 18175-183
research, summary, 18175
National Institutes of Health:
almanac, 10055
appropriations, 1968, hearings, 10631
associate training programs, medical and
biological sciences, 5420
Division of Research Services, services of
1966, record of achievement, 10046
grants and awards program, guide, 17143
health scientist administrators and grants
associates, examination announcement,
amendment, 5922
legislative activities of 89th Cong., 2d
sess., that interest NIH, summary, 7094

INDEX 1967

- National Institutes of Health—Continued**
 library, periodicals currently received, 11757
 library translations index, 1966 supplement, 15700
 programs, work, etc., 11744
 research grants, administration, report, 17575
 research highlights on studies conducted, etc., 10061
 research methods and instrumentation, developments, symposium, 17163
 research programs, report, 14616
 resources for medical research, report, 10062
 scientific directory and annual bibliography, 8643, 13090
 special meeting of Federal Fire Council, 12594
see also Clinical Center, National Institutes of Health.
- National Interagency Council on Smoking and Health**, conference, highlights, 7077
National Intergovernmental Affairs Council, establish, hearings, 4639, 13864
National Key Deer Refuge, birds of Florida Keys national wildlife refuges, list, 17780
National Labor Conference, conventions, etc., adopted, withdrawal of treaty, text, 15064
National labor relations act, *see* Industrial relations.
National Labor Relations Board:
 appropriations, 1967, law, 491
 appropriations, 1968—
 hearings, 9144, 13841
 reports, 10612, 15082
 arbitration and N.L.R.B., 2d look (paper), 6937
 career in labor-management relations as field examiner, 2748
 case developments, quarterly report, 3799
 collective bargaining elections, milestone in industrial democracy (remarks), 6939, 8532
 decisions and orders, 2749, 5300, 11600, 15594
 decisions as seen from inside NLRB (remarks), 17043
 decisions, digest, CS-series, 1529, 3204
 election reports, 3589
 elections, information for voters, 12904
 field manual, 15595
 general counsel, nomination of Arnold Ordman, hearings, 12421
 member, nomination of—
 Brown, Gerald A., hearing, 4651
 Gamser, Howard G., hearing, 9327
 press releases, 3746
 report, 12992
 statistical summary, quarterly, 3590
 weekly summary of cases, 4058
National Library of Medicine:
 bibliography of—
 medical reviews, 15597
 medical translations, annual index, 14526
 catalog—
 annual cumulation, 8533
 biweekly listing, 3597
 cumulative listing, 11601
 printed books, 16th century, 15598
 general information, 5301
 Library Associate Program, curriculum, qualifications, etc., 5302
 notes for medical catalogers (periodical), 3639
 prints and photographs collection, 14527
National Manpower Resources Board, establish, reports, 10608, 12246
National Marketing Conference:
 proceedings, 10465
 report, 5961
National Mediation Board:
 appropriations, 1967, law, 491
 appropriations, 1968—
 hearings, 9144, 13841
 reports, 10612, 15082
- National Mediation Board—Continued**
 mediator, examination announcement, 14868
 report, 6942
National Mental Health Manpower Studies Committee, meeting, highlights, 2829
National Meteorological Center, ESSA technical memorandum, WBTM NMC series, 12479
National monuments and memorials:
 American memorials and overseas military cemeteries, general information, 14787
 code of Federal regulations, 9476
see also names of monuments or memorials.
National Motor Vehicle Safety Advisory Council:
 create, report, 645
 opening session (remarks), 4455
National Museum:
 act of 1966—
 law, 392
 report, 681
 Aradidae (Hemiptera: Heteroptera), notes, 5307
 bulletins, 1530, 8535, 9951, 11602, 12996, 14528-531, 15599-600, 17046
 Pacifica tunicata specimens, descriptions, 9950
 proceedings, 2751, 5304-16, 6943-71, 8536-50, 9952-53, 11603-612, 12998-999, 14533-546, 15602-607, 17050-51, 18089
 title pages, etc., 13000, 14544-546, 17051
 publications, price list, 15671
National Observances and Holidays Commission, establish, report, 7705
National Oceanographic Data Center:
 archived data inventory, Arctic and Antarctic supplement, 6996
 newsletter, 3598
 NODC Ad Hoc Committee and working group activities, summary, 11631
 publications, 2770, 6996-97, 8568-69, 11629-631, 14570, 15624
 quarterly accessions, computer-produced indexes, 3636
National oceanographic program, 1042
National Park Foundation:
 establish—
 hearing, 15162
 reports, 15006, 15120
National Park Service:
 appropriations, 1968, hearings, 7734
 historical handbook series, 1533
 announcement and order form, 8621
National Capital parks, 1967 activities, 9955
 policies and practices for rebuilding used motor vehicle tires, GAO review, 14162
 press releases, 3747
 programs, briefing session, hearings, 10655
 records, preliminary inventory, 14509
 seasonal employment, 8562
 selection of national parklands and landmarks, criteria, 8554
 Yellowstone National Park, elk population, control, hearings, 10803
National parks:
 airports, authorization, increase, law, 467
 camping fees, facilities, etc., 15610
 code of Federal regulations, 9476
 heritage to discover, 2184
 public use, statistical report, monthly, 3786
 selection of national parklands, criteria, 8554
see also names of parks.
National policy for American education, 10935
National Portrait Gallery, general information, 8564
National poultry improvement plan, *see* Chickens—Poultry.

National Railroad Adjustment Board:
 appropriations, 1968, hearings, 9144
 awards, 2760, 5322, 6988-90, 8565, 8965,
 11621-622, 14556-559, 15614-615,
 17055-56
 report, 6942
 National Railway Labor Conference:
 dispute with employees—
 extend period under railway labor act—
 laws, 9040, 10482
 reports 9112, 9270, 10567, 10736
 messages from the President, 9074,
 10511, 10514
 settlement—
 hearings, 10660, 10868
 law, 13534
 reports, 12259, 12267, 12364, 13667
 status of negotiations, hearing, 9328
 emergency board report, 9415
 National Reactor Testing Station, hydrology
 of area, 16890
 National Register of Scientific and Technical
 Personnel, American science manpower,
 1964, report, 5323
 National Research Council:
 report, 1963—
 departmental edition, 6694
 document edition, 6051
 report, 1964—
 departmental edition, 16876
 document edition, 16347
 National School Safety Patrol Week, designa-
 te, report, 10778
 National Science Foundation:
 act of 1950, amend, reports, 7669, 9106
 administer sea grant colleges and program
 act—
 law, 402
 reports, 632, 679
 administration of contract for operation
 of National Center for Atmospheric Re-
 search, opportunities for improvement,
 GAO report, 16671
 appropriations, 1968—
 hearings, 9145, 15147
 reports, 10600, 15131
 grants and awards, 8566
 report, 1966—
 departmental edition, 8567
 document edition, 7613
 reviews of data on science resources, 2762,
 5325-26
 scientific documentation, information, re-
 quirements, etc., price list, 6916
 National search and rescue manual, amend-
 ment, 12124
 National security:
 act of 1947, as amended, text, 4630
 do you take security regulations seriously
 enough?, poster, 4681
 don't guess! ask your security supervisor,
 poster, 13927
 Government operations, investigation, au-
 thorization, report, 4609
 internal security act, amend, reports,
 10618, 12263, 16250, 16290
 internal security laws—
 administration, investigation—
 authorization, report, 4619
 hearings and reports, 1961-66, index,
 15168-169
 gaps in, investigations, etc., hearings,
 12418, 13873
 NGB pamphlet, 6934
 let's face it, security is up to you (poster),
 10901
 management—
 correspondence course offered by Indus-
 trial College of Armed Forces, 2422,
 7863
 defense transportation, Military Traffic
 Management and Terminal Service,
 monograph, 16731
 maintenance management in Defense
 Dept., monograph, 17858
 production management, defense mate-
 rial system, monograph, 9608

National security—Continued
 safeguarding free world against totali-
 tarian threat (address), 12531
 security is always in season, poster, 7865
 security takes no vacation! (poster),
 15209
 State Department security, 1963-1965,
 administration, investigation, hearings,
 2131
 U.S. life lines, arteries of international
 commerce, 8574
 United States, impact of Chinese Commu-
 nist nuclear weapons progress, report,
 13542
 see also National defense.
 National Security Agency, appropriations,
 1965, military construction, hearings,
 15016
 National Security Seminar:
 presentation outlines and reading lists,
 2423, 15342
 prospectus, 11241
 National service life insurance, see Life in-
 surance.
 National Severe Storms Laboratory, ESSA
 technical memorandum, IERTM-NSSL se-
 ries, 6220-22, 10964, 15231, 16532
 National Shipping Authority, current regu-
 lations, index, 11348
 National standard reference data series,
 1523, 8524, 17035-36, 18077
 National standard reference data system:
 extend service—
 hearing, 12405
 reports, 10601, 14956
 NSRDS news, 8525
 National Teacher Corps:
 change name, etc.—
 law, 12176
 reports, 12275, 13643, 13805
 extend and amend program—
 hearings, 7742, 9153, 12419, 17664
 reports, 9118, 10557
 handbook, 9411
 higher education act of 1965, administra-
 tion of programs, 1966, notes and work-
 ing papers, 12422
 missionaries in classroom, 6188
 National Traffic Safety Agency:
 establish, report, 645
 initial Federal motor vehicle safety stand-
 ards, Jan. 31, 1967, report on develop-
 ment, 9024
 National Traffic Safety Bureau, establish,
 law, 389
 National Transportation Safety Board:
 chairman, nomination of Joseph J. O'Con-
 nell, Jr., hearing, 10823
 establish—
 law, 389
 report, 906
 members, nominations of Francis H. Mc-
 Adams, Louis N. Thayer, John H. Reed,
 Oscar M. Laurel, hearing, 10823
 organization and purpose (remarks), 18094
 powers, goals and future (address), 13015
 responsibilities and activities (remarks),
 16093
 National Trust for Historic Preservation in
 United States, grants-in-aid for responsi-
 bilities, law, 384
 National turkey improvement plan, see
 Turkeys.
 National UNICEF Day, designate, report,
 9291
 National Union Catalog:
 Library of Congress, 1393, 3601
 manuscript collections, 2531
 register of additional locations, 16838
 National Visitor Center:
 commission to study facilities and serv-
 ices, create—
 law, 494
 report, 631
 report of National Visitors Center Study
 Commission, 16341

INDEX 1967

National warning system, *see* Warning systems.
 National Water Commission :
 establish—
 hearings, 9162
 message from the President, 5992
 reports, 4613, 12278, 13661
 National Weather Records Center, functions, capabilities, and scope, 13991
 National Wilderness Preservation System, annual report, 7607
 National ZIP code directory, 14609
 National Zoological Park :
 concessions, negotiate cooperative agreements granting, law, 476
 reorganization—
 hearing, 736
 report, 2021
 Nationalism, Arab, Soviet view, 9629
 Nationality :
 code of Federal regulations, 776
 immigration and nationality act, amend—
 hearings, 7751, 17606
 law, 474
 reports, 678, 688, 876
 Nations, *see* Foreign countries.
 Nation's census taker, 5889
 Native sandhills grasses, 16621
 NATO, *see* North Atlantic Treaty Organization.
 Natural Bridges National Monument, general information, 8559
 Natural convection in ice melting from below, 7378
 Natural gas, *see* Gas.
 Natural History Museum, annual report, 14548
 Natural resources :
 agriculture/2000, resources in action, outline of conservation policies, 10200
 Alaska, 1139
 Alaska and Rampart project, 12636
 America's department of natural resources, Department of Interior, activities, etc., 2391
 California, 15325
 conservation—
 and development, FHA loans, 10193
 conservation aid series, 8693
 conservation information series, 14650
 let's urbanize conservation education (remarks), 16713
 publications, list, 7051
 yearbook, 8207
 announcement and order form, 10035
 developing, message from the President, 5992
 Federal legislation, 1950-66, digest, 13948
 High Rock Nature Conservation Center, New York City's educational workshop for children, 13959
 management analyst development program, career opportunity, 9586
 our environment, reclamation and rehabilitation of strip and surface mining areas, special report, 14201
 outdoors USA, agriculture yearbook—
 departmental edition, 17825
 document edition, 17566
 perspectives on natural resources and human resources, seminar, 6597
 population growth and earth resources, 14238
 ranger arithmetic for—
 1st and 2d grade teachers, 2293
 3d grade teachers, 2294
 4th grade teachers, 2295
 5th grade teachers, 4825
 6th grade teachers, 11108
 7th grade teachers, 2296
 resource and conservation development projects, cost sharing grants, report, 16368
 resource bulletins, 2335-39, 4857-60, 8121-24, 14146, 16290, 16665-666, 17807-809

Natural resources—Continued
 resource publication (series), 1081, 2250-81, 4808, 6356, 8033-34, 12548, 15267, 16624-626, 17784-785
 South Dakota, 8209
 third wave, America's new conservation, 8207
 announcement and order form, 10035
 Wyoming, 2392
 see also Land.
 Naturalization :
 active-duty service in U.S. Armed Forces, hearings, 7750
 becoming a citizen series, 11211, 12629-630
 candidates, English and Federal Government, Federal textbook on citizenship, 14190, 17844
 candidates, our Constitution and Government, Federal textbook on citizenship, 12631-632
 employees of U.S. nonprofit organizations disseminating information that promotes U.S. interest, permit, hearings, 17606
 exemption from English language requirement of immigration and nationality act, amend, hearing, 7751
 investigation—
 authorization, report, 4603
 report on findings, etc., 9286
 publications, price list, 10040, 15672
 requirements and general information, 14192
 see also Citizenship.
 Naumann, Robert J., near-earth meteoroid environment, 1512
 Nauru Island, *see* Australia.
 Nautical almanacs, *see* Almanacs.
 Nautical charts, *see* Maps and charts.
 Navajo Dam and Reservoir :
 technical record of design and construction, 7103
 errata, 8667
 Navajo Indians, rights and interests in certain lands held in trust, determine, report, 13832
 Navajo National Monument, general information, 14551
 Navajo Reservation, royalties from lands, expenditure for health, etc., report, 881
 Naval Academy, Annapolis :
 catalog, 5327, 17061
 permitting persons from countries friendly to U.S. to receive instruction—
 law, 506
 report, 692
 register, 15617
 Naval Air Systems Command, employment opportunities, 3234
 Naval art and science :
 antimechanized operations, 16841
 Marine Corps, personnel support, manual, logistics, 6624
 naval research logistics quarterly, 3606
 Naval aviation, *see* Aeronautics.
 Naval aviation news, 3605
 Naval bases, advanced, defense, 6625
 Naval ceremonies, honors, and salutes, flags, pennants, customs, change, 18103
 Naval Control of Shipping Organization, training plan for Naval Reserve officers, qualifications and professional development, 5341
 Naval districts, *see* Navy Department.
 Naval education :
 educational services manual, 15632
 electronics, trainee's guide for fire control technician training, 2776
 naval training bulletin, 3611
 programmed instructional material, catalog, 18106
 reading and writing for success in Navy—
 book 1, 2778
 book 2, 2779
 recruit's day-to-day experiences, 2780
 trainee's guide for Naval school, 11666

- Naval education—Continued
training equipment and individual differences, study, 9980
training publication for advancement in rating, 11667
- Naval engineering:
principles, 7021
specialist program, Naval Reserve, organization, administration, and training guide for naval engineering companies, 11660
- Naval establishment, *see* Armed Forces—Navy Department.
- Naval Facilities Engineering Command:
design manuals, 2764-66, 13016, 14565-566, 17063-66, 18095
cumulative index, change, 2766
progress report, 6994
- Naval history:
chiefs of naval operations and Admiral's house, 9976
Civil War naval chronology, 1541
naval documents of American Revolution
American theatre, Sept. 3-Dec. 7, 1775,
European theatre, Aug. 11-Oct. 31, 1775,
2773
- Naval hospitals:
hospital and medical facilities, design manual, 17064
medical residencies and specialty courses, 1396
- Naval installations, *see* Installations (military).
- Naval Junior ROTC, *see* Reserve Officers' Training Corps, Navy.
- Naval Material Command:
officers, perquisites of office, retaining rank, pay and retirement privileges—law, 454
report, 935
- Naval Observatory, publications (series), 11628, 15623
- Naval Oceanographic Office:
career opportunities, 1536
chart correction list, 5337, 14582
notice to aviators, index, 9967
publications series, 1537-40, 2771-72,
5328-36, 6998-7006, 8570-73, 9968-75,
11632-648, 13018-23, 14571-581,
15625-630, 17069-77, 18096-102
special publication SP series, 13024
technical reports and special publications, catalog, 11632
- Naval officers, *see* Navy.
- Naval Operating Base, Newfoundland, ferry service, agreement with Canada, 5534
- Naval operations, 13027
- Naval Ordnance Systems Command:
employment opportunities, 3235
NAVORD report, 1542
ordnance pamphlet OP series, 7009
- Naval Personnel Bureau:
career publication, 3025
personnel administration, functions, etc., 11661
training manuals and correspondence courses, list, 11657, 14585
- Naval petroleum reserves, no. 4 and adjacent areas, northern Alaska, 1944-53, exploration (series), 8159
- Naval Research Laboratory:
memorandum, report series, 5344
progress in high-power laser research, 1553
progress, report, monthly, 3821
report series, 1548-54, 5345-64, 8586-98,
9983-10018, 11671-681, 13031-36,
14591-597, 15636-638, 17082-96,
18110-114
satellite position display, simplified prediction equations for, 5349
science education program, 17097
terrain clutter study phase 1, 14591
test and evaluation report, 8599
- Naval research logistics quarterly, 3606
- Naval Research Office, ACR series, 11669, 13030
- Naval research reviews (periodical), 3607
- Naval Reserve:
chaplains handbook, change, 8580
- Fleet Divisions, guide for afloat training, 7017
- naval engineering specialist program, organization, administration, and training guide for naval engineering companies, 11660
- officers, qualifications and professional development, 5341
officers, retired, register, 1546
- Naval reservist (periodical), 3608
- Naval schools, *see* Naval education.
- Naval Ship Systems Command, technical news (periodical), 3609
- Naval stations:
Long Beach, Calif., adjust legislative jurisdiction of U.S. over lands within—
hearing, 16308
reports, 16268, 17625
- Naval stores:
act, repeal, hearing, 708
annual report, 11581
demand and price situation, 5660
report, monthly, 3610
- Naval Submarine Medical Center:
reports, 9753, 11346-349, 12790-794,
14317-321, 16845
research reported, 1966, summaries, 16846
special reports, 16846
- Naval Tactical Data System, use as satellite display, 14593
- Naval training, *see* Naval education.
- Naval Training Device Center:
publications, index, 2783
technical reports, 2784, 5343, 7024, 8585,
9980-82, 11670, 15635, 18109
training device developments (periodical), 18115
training device guide, 8600, 15639
- Naval vessels, *see* Ships—Submarine boats—Warships.
- Naval Weapons Bureau:
directory, 3066
employment opportunities, 3236
- Navarro, Alfredo A., relief, 19533, 13509, 13753
- Navarro, Antonio L., relief, 10723, 16207, 17511
- Navarro, Eloy C., relief, 15073
- Navarro, Mario P., relief, 304
- Navigable waters, *see* Navigation.
- Navigation:
act of 1967, proposed draft, 10828
aids, Coast Guard list—
Great Lakes, 9003
Mississippi River system, 9004
aids to navigation manual, appendix, 8999
aids to navigation services of Coast Guard, improve—
hearings, 745
law, 382
reports, 669, 4585
- Arkansas River entrance, hydraulic model investigation, 17737
- Arkansas River, lock and dam no. 4, hydraulic model investigation, 2221
- Belleville Locks and Dam, Ohio River, hydraulic model investigation, 1030
- Columbia Lock and Dam, Ouachita River, hydraulic model investigation, 6212
- Doppler method in navigational use of artificial earth satellites, USSR, 11280
- Holt Lock and Dam, Warrior River, Ala., hydraulic model investigation, 4744
- Inertial, application of Kalman filtering to error correction, 6904
- Inertial, development and nature, French expert outlines, 9672
- laws, equipment, Coast Guard approved lists, 9002
- McAlpine Locks and Dam, Ohio River, hydraulic model investigation, 6210

INDEX 1967

Navigation—Continued

- maps, Gulf Intracoastal Waterway, New Orleans, La. to Port Arthur, Tex., etc., 8383
- Millers Ferry Lock and Dam, Alabama River, hydraulic model investigation, 10961
- navigable waters—
 - code of Federal regulations, 6287, 9475
 - pollution of Moriches Bay and eastern section of Great South Bay and their tributaries, conference proceedings, 6339
- notice to mariners, 3641, 7007
- Great Lakes and tributary waters, 3642, 9006
- radio aids—
 - Atlantic and Mediterranean area, changes, 5336, 9074, 11646, 14580, 18102
 - Pacific and Indian Oceans area, changes, 7006, 11647, 17075
- rules of the road—
 - Great Lakes, 221
 - western rivers, 4421
- satellites, future potentials, 11394
- space—
 - accuracy for infrared equipped Apollo aircraft for reentry tracking, 1507
 - Apollo lunar module, linearized error analysis of onboard primary navigation systems, 15556
 - celestial-inertial for low-thrust interplanetary vehicles, error analysis, 8424
 - manual, theory, 14390
 - midcourse, using statistical filter theory, manual theodolite, and symbolic computer control, 6905
 - sextant, measurements during lunar module rendezvous, analysis, 6903
 - star sensor fields of view determined by analytical approach, 11557
- Tennessee River experience, navigation and economic growth, 5567
- underwater, deep ocean acoustic sources, method for determining location, 8588
- see also Air navigation—Loran.
- Navigator (periodical), 3612
- NAVNEWS 1967 art portfolio, 7025, 17098
- NAVORD report, 1542
- NAVTRADEVCSN, see Naval Training Device Center.
- Navy:
 - advancement in rate or rating, manual, 7019, 18107
 - Chief of Naval Operations, appointment, etc.—
 - law, 12164
 - report, 10611
 - civil engineer (periodical), 3613
 - civilian manpower management (periodical), 8602
 - constructing and using achievement tests, guide for instructors, 1544
 - dental administration, manual, changes, 8576, 14584
 - editors, NAVNEWS 1967 art portfolio, 7025
 - addendum, 17098
 - educational services manual, 15632
 - enlisted members, computing retired pay, report, 16270
 - enlisted personnel classification manual, 5339, 14586
 - fabrication, welding, and inspection of machinery, piping, and pressure vessels for ships, military standard, 2154
 - field press censorship, manual, 13293
 - France, hull testing basin, means of experimentation and research, 11258
 - management review (periodical), 3614
 - medical residencies and specialty courses, 1396
 - medicine, statistics, quarterly, 3904
 - messes ashore, manual, 9977

Navy—Continued

- naval operations, 13027
- notice to aviators, 3640
- index, 9967
- nuclear power and Navy (remarks), 7439
- occupations, enlisted programs handbook, 8581
- ocean science program, accomplishments and prospects, 14598
- officers—
 - classifications manual—
 - changes, 2777, 18108
 - cross reference index, 7014
 - professional reading guide, 17079
 - register—
 - departmental edition, 11662
 - document edition, 10501
 - retired, register, 1546
- petty officers—
 - 1 & C, military requirements, Navy training course, 8579
 - 3 & 2 military requirements, Navy training course, 5340
- prime contractors, selling to, 17100
- procurement directives, 3615
- public works management, 2781
- ribbons of decorations and awards (poster), 11663
- seapower, guardian of freedom, 9976
- ship's serviceman 1 and C, training course, 14589
- ship's servicemen's handbook, 14588
- sites, engineering weather data for heating and air conditioning design, etc., 11947
- supplying the Navy, description of total complex, etc., 13029
- systems, electronic equipment packaging, design guidelines manual, 17099
- terminal facilities guide, Defense Supply Agency handbook, 17690
- training publications for advancement in rating, 11667
- treaties and agreements of interest to, compilation, 11291
- U.S., in southeast Asia, report, 10815
- U.S. ships and aircraft, lithographs, 11650
- see also Naval bases—Uniforms.
- Navy Civil Engineer Corps, see Civil Engineer Corps, Navy.
- Navy Department—
 - annual report, 2149
 - appropriations, 1968, military construction, hearings, 15016
 - Chief of Naval Operations, nomination of Thomas H. Moorer, hearing, 15148
 - defense supply system, savings available by eliminating low-cost, low-demand spare parts, GAO report, 17815
 - F-4 aircraft, supply and maintenance support, need for improvement, GAO report, 11147
 - food operations reference manual, increments, 15640-641
 - inventory accounting system for aeronautical equipment, GAO review, 16876
 - Judge Advocate General Office, organization and functions, 15633
 - naval districts, delineate boundaries by law, etc.—
 - hearings, 13695, 16395
 - law, 17555
 - reports, 13684, 16688, 16284, 16371
 - nuclear submarine propulsion equipment procurement under Public law 87-653, GAO report, 16674
 - preserve pay and retirement privileges for former deputy chiefs of bureaus—
 - law, 454
 - report, 935
 - procurement of spare aircraft parts for outfitting aircraft carriers, potential savings, GAO report, 8136
 - public information, direction for commanders, etc., 3209
 - safety review (periodical), 3844

Navy Department—Continued

Secretary, nomination of—
 Ignatius, Paul R., hearing, 15149
 McNaughton, John T., hearing, 15148
 shipbuilding contracts, price increases,
 GAO review, 2351
 Under Secretary, nomination of Charles
 F. Baird, hearing, 15148
 Navy Nurse Corps, see Nurse Corps, Navy.
 Navy Supply Corps, newsletter, 3616
 NAWAS, see Warning systems.
 NBS, see National Bureau of Standards.
 NDEA, see Education.
 Neal, J. L., pr., two simple, time-saving tech-
 niques for studies of soil micro-organisms,
 16656
 Neal, Luther, Jr., turbulent-skin-friction and
 heat transfer charts adapted from Spald-
 ing and Chi method, 11518
 Nealon, Robert J., textile mills, machinery,
 fiber, and fabric consumption, 4272
 Nealy, John E., models for analysis of CN
 violet radiation behind shock waves, etc.,
 9905
 Near-earth meteoroid environment, 1512
 Near East, see East (Near East).
 Near-space environment, 11575
 Nearctic region:
 Gelechioidea, Lita group (Lepidoptera:
 Gelechioidea), revision, 6949
 parasites of genus *Rhyacionia*, key, with
 species annotations, 16649
 Nebraska:
 area measurement reports, 12034
 census of agriculture, 1964, State and
 county statistics, 13405
 census of mineral industries, 1963, area
 statistics, 5832
 climatological data, 3096
 county business patterns, 1867, 12054
 electric rate book, 4775, 16584
 mineral industry, minerals yearbook chap-
 ter, 2559
 ponderosa pine transplants, ten-year
 growth of 2 sources of large grade, 2312
 postal map, 15662
 precipitation data, hourly, 3401
 sedimentary rocks, chemical composition,
 14172
 statehood, 5-cent commemorative post-
 age stamp (poster), 13050
 Nebraska, midstate division, see Missouri
 River Basin project.
 Neches River, chemical quality of surface
 waters of basin, reconnaissance, 17830
 Nectarines, production, use, value, 1965-66,
 by States, 14695
 Need a little help? 8839
 Need for entangling alliances (address),
 6190
 Needed, a team effort, 17841
 Needles, Calif., conveying mineral interests
 to, report, 15093
 The Needles, Utah, regional geophysical in-
 vestigations, 2368
 Neglected majority (address), 7903
 Negotiated contracts, see Government con-
 tracts.
 Negroes:
 colleges and universities, directory, 9679
 graduates of predominantly Negro col-
 leges—
 class of 1964, special report, 14625
 directory, 2483
 housing discrimination (statement), 13057
 in apprenticeship, 16793
 in the West—
 family, 15453
 social and economic conditions, 15453
 occupational progress, 16829
 plight in today's ghetto (remarks), 17841
 population—
 estimates by age and sex, 10365
 Mar. 1965, characteristics, 176
 Mar. 1966, characteristics, 4348

Negroes—Continued

prose, poetry, and black power (address),
 9407
 pupils, enrollment in Southern and bor-
 der States, 4711
 success in employment, 15223
 woman, in U.S., new roles, new challenges
 (address), 1668, 10142, 17296
 workers, impact of changing economy,
 statistics, 16531
 Nehmer, Stanley:
 address, etc.—
 May 9, 1967, 10470
 Sept. 13, 1967, 16111
 Nellburg, Samuel C., relief, 359
 Neighborhood Youth Corps:
 amendments to economic opportunity act—
 law, 498
 narrative summary, 9382
 enrollees with epilepsy, project sponsors
 guide to placement, 2488
 fact sheets, 4692, 10907
 from world of poverty to life of hope,
 6590
 in inner-city, 14729
 national conference, report, 1352
 NYC project sponsors, directory, 2486
 to choose or not to choose (address), 17298
 Neighborhoods:
 facilities, enriching community life, Fed-
 eral assistance program, 2380
 health centers—
 demonstration program, general infor-
 mation, 9383
 questions and answers, 7877
 low-income neighborhoods, strengthening
 community services, field guide to con-
 certed services, report of joint task
 force, 17840
 model neighborhoods—
 in demonstration cities, program guide,
 4909
 under demonstration cities act, 6480
 neighborhood center, community action,
 2164
 poor, prices, 14305
 service centers, 5595
 Nellae program, see Electronic computers.
 Nelson, Alice F., foreign agriculture, includ-
 ing foreign crops and markets, 3344
 Nelson, Arne B.:
 chronic illness among residents of nursing
 and personal care homes, 11764
 prevalence of chronic conditions and im-
 pairments among residents of nursing
 and personal care homes, 14639
 Nelson, Arthur, image interpreter reference
 and auxiliary information, 4226
 Nelson, Arthur E., Cretaceous and Tertiary
 rocks in Corozal quadrangle, northern
 Puerto Rico, 1112
 Nelson, Donald J., Jr., environmental radia-
 tion surveillance, 10048
 Nelson, Howard D., use of malathion-treated
 drying trays to protect raisins from in-
 sects during drying and storage, 15859
 Nelson, James B., determination of kinetic
 parameters of 6 ablation polymers by
 thermogravimetric analysis, 9896
 Nelson, John T., relief, 9231
 Nelson, Morland W., water supply outlook
 and Federal-State-private cooperative snow
 surveys for Idaho, 4046
 Nelson, Ralph D., Jr., selected values of elec-
 tric dipole moments for molecules in gas
 phase, 17035
 Nelson, Robert E., plantation timber on
 Island of Hawaii, 4853
 Nelson, S. S., model membrane studies re-
 lated to ionic transport in biological sys-
 tems, 6443
 Nematoid worms, plant-parasitic nematodes
 associated with forest trees, world dis-
 tribution, 16645

INDEX 1967

- Nemikol-5, treatment of dogs after lethal doses of sarin and soman, changes in conditional reflex activities, Bulgarian study, 6563
- Nemoto, Edwin M., carotid and femoral artery blood flow in hyperthermic cats, 5710
- Neodymium, metals, high-purity, electro-winning from their oxides, 11384
- Neon:
- dilute, viscosity and thermal conductivity coefficients, 11589
 - helium-neon laser discharge parameter study, 17086
- Neon isotopes:
- abundance in natural gases, rel. to helium genesis, 9785
 - cancel errors in gas laser, 5226
- Neotropical region:
- microlepidoptera, revision of genus—*Idolatteria*, 8538
 - Pseudatteria*, 6944
- Nepal:
- accessions list, Library of Congress American Libraries Book Procurement Center, New Delhi, 3618
 - background notes, 15757
 - capsule facts for Armed Forces, 17370
- Nephelins, slintering, USSR study, 9645
- Nephritis, *see* Pyelonephritis.
- Nerilidae, *see* Flies.
- Nerves:
- autonomic periphery, structure and reactive properties, USSR study, 12716
 - characteristics of neuronal structure and synapses in brain stem and spinal cord and their significance in carnivores, USSR study, 12711
 - higher neural activity, USSR conference, 15384
 - mitochondrial nerve cells, electron microscope investigation, USSR study, 15348
 - neuron differentiation in different parts of rabbit brain, USSR cytochemical study, 14221
 - photodiffusion in nerve cells under effect of local and irradiating excitation, USSR study, 14259
 - sympathetic ganglion cells and acridine orange-DNA complex spectra, USSR studies, 12702
- Nervous system:
- biochemistry, 4th all-Union conference, 1336
 - central—
 - dog, following rapid decompression to 1 mm.Hg, residual pathologic changes, 1743
 - effect of electromagnetic and magnetic fields, 14504
 - functions, effect of space-flight factors, 12973
 - effect of high and low afferentation on human organism from viewpoint of space psychophysiology, USSR studies, 1345
 - information and the nervous system, USSR study, 14250
 - neurological impairments, estimated range and cost of disability, 11745
 - neuropathology development in Tadzhikistan, 4983
 - problems of neurochemistry, USSR studies, 4996
 - self-regulation of higher nervous activity, USSR study, 17880
- Nesbitt, John A., remarks, Apr. 27, 1967, 11705
- NESC, *see* National Environmental Satellite Center.
- Neshaminy Creek, watershed project, hearing, 12427
- Nests, trap-nesting wasps and bees, life histories, etc., 8685
- Neth, Rosemarie G., relief, 12333, 16193
- Netherlands:
- amateur alien radio operators, authorization to operate, agreement, 8740
 - Educational Foundation and financing of exchange programs, agreement, 11861
 - establishing business in, 12135
 - mineral industry, minerals yearbook chapter, 11362
- Netherlands Antilles:
- background notes, 15758
 - foreign trade regulations, 13460
 - fish nets, *see* Fish nets.
- Networks:
- gratings and networks of aluminum ribbons as radio reflectors, 16902
 - meteorological rocket network firings, data report (periodical), 1032, 3190
 - parallel-T, use for developing quadrature voltages at variable frequencies, 5361
 - planning, algorithm for solution of resource distribution problem, 17868
 - recovery, orbital recovery problem, rapid determination of return and lateral-range for recall, analysis technique, 12969
 - spinning paraboloidal tension networks, 16903
 - see also* Electric networks.
- Netzeband, F. F., mineral industry of Texas, 6067
- Neuman, Robert B.:
- bedrock geology of Shin Pond and Stacyville quadrangles, Penobscot County, Maine, 17825
 - scientific Ordovician brachiopods from Kentucky, 16697
- Neumeier, Leander A., tungsten-cobalt system for compositions to 85 atomic percent cobalt, 12816
- Neurochemistry, problems, USSR studies, 4996
- Neurodermatitis patients, treating with electrosleep and hypnosis, USSR excerpt, 17874
- Neurological diseases, *see* Nervous system.
- Neurological Diseases and Blindness, National Institute of, *see* National Institute of Neurological Diseases and Blindness.
- Neurology:
- National Institute of Neurological Diseases and Blindness, information network, 15699
 - neural sciences, translations, 1950-60, bibliography, 17137
- Neuromuscular disorders, progress in research, 15180
- Neurons, *see* Nerves.
- Neuropathology, *see* Nervous system.
- Neurophysiology:
- USSR conference, 15384
 - USSR experiments, 1325
- Neuropsychiatry:
- in World War II, zone of interior, 13311
 - mentally restored, interviewing guides for specific disabilities, 10944
- Neutrality, neutralization in southeast Asia, problems and prospects, 2116
- Neutron activation and analysis, *see* Radio-activation analysis.
- Neutron radiative capture, thermal neutrons, prompt gamma rays, 5776
- Neutron spectrum, *see* Spectra.
- Neutron transmutation, doping, semiconductor devices, fabrication, 12010
- Neutrons:
- americium-beryllium neutron sources, fabrication, apparatus prevents capsule contamination, 14366
 - bombardment, influence on certain properties of tungsten, USSR study, 15389
 - computer program BARI-QUIR 111 provides solution of steady-state, multi-group, 2-dimensional neutron diffusion equations, 17927
 - differential, thermalization, summary report, 13323

Neutrons—Continued

- diffractometer allows both magnetic and crystallographic analyses, 12835
effective delayed fraction, measurement for NASA Zero Power Reactor I, 2694
embrittlement of—
higher strength steels, 5356
reactor pressure vessel steels, exposure criteria, 5355
exposure, pressure vessel wall of A 302-B steel, through-thickness notch ductility and tension properties, 17093
fast-neutron spectrometer, advanced design, 2069
Halpern-type detector, study, 11502
intense neutron sources, seminar, proceedings, 13315
lightweight shield material, provided by aluminum-titanium hydride-boron carbide composite, 16878
noise, waves, and pulse propagation symposium, proceedings, 12003
plutonium-beryllium, ages, in tungsten-water media, 1502
production by fusion in class of anisotropic plasmas, 5347
real and adjoint flux for NASA zero power reactor (ZPR-1), transport study, 11535
resonance absorption, calculation in 2-region problems, GAROL code, 15486
resonance integrals of separated tungsten isotopes, 9014
sources, practicability of production and application in Yugoslavia, 4980
thermal, image intensifier tube provides brightly visible radiographic pattern, 17921
thermal, prompt gamma rays from radioactive capture, 5776
- Nevada:
area measurement report, 5813
census of agriculture, 1964, State and county statistics, 7510
census of manufactures, 1963, area statistics, 161
census of mineral industries, 1963, area statistics, 4293
climatological data, 3096
compositionally zoned ash-flow sheet in southern region, 1120
county business patterns, 173, 12055
early Indian tribes of Lower Plateau, 6437
electric rate book, 4776
mineral industry, minerals yearbook chapter, 8358
precipitation data, hourly, 3401
radioactivity, airborne, 1953-56, maps, 1801
southern, Upper Triassic and Triassic (?) formations, correlation, 6393
water supply—
fall summary, 17205
outlook and snow surveys, 4048
- Nevinson, John L., origin & early history of the fashion plate, 14531
- Nevis, see Leeward Islands.
- New, John C., environment-simulation testing for spacecraft, 11549
- New act of faith, remarks, 7438
- New benchmark production measures, 12533
- New Brunswick Laboratory, research progress report, 13332
- New Caledonia, mineral industry, minerals yearbook chapter, 9759
- New Crops Research Branch, plant material introduced, 8810, 15828
- New directions, pamphlet for prospective retirees from foreign affairs agencies, 8721
- New England:
climatological data, 3096
commercial fisheries, 15255
cost study of general freight transportation, 9604, 11234
fisheries, annual summary, 9503

New England—Continued

- labor and economy, 1966, year-end report, 16828
NE regional reports, 16828
northern, vacation home study, 18116
offshore fisheries, brief history, 8021
precipitation data, hourly, 3401
regional economic research and planning review, 7871
southern, aeroradioactivity survey and areal geology, 1778
southern coast, Sphaerionellopsis monothrix and host Parastereopsis pollex, new crustaceans, 15605
- New England Regional Commission, Federal cochairman, nomination of John J. Linnehan, hearing, 4657
- New Era (periodical), 3620
- New era for America's waters, 6342
- New Guinea, mineral industry, minerals yearbook chapter, 9759
- New Hampshire:
area measurement report, 1831
census of agriculture, 1964, State and county statistics, 5903
census of manufactures, 1963, area statistics, 162
census of mineral industries, 1963, area statistics, 5833
county business patterns, 13375
electric rate book, 1056
minerals industry, minerals yearbook chapter, 2560
postal map, 5392
- New Haven, Conn., area wage survey, 11312
- New Hebrides:
Geniostoma, description, title page and index, 17048
mineral industry, minerals yearbook chapter, 9759
- New Jersey:
area measurement report, 4268
census of agriculture, 1964, State and county statistics, 7504
census of manufacturers, 1963, area statistics, 1844
census of mineral industries, 1963, area statistics, 5834
climate, 9426
climatological data, 3096
commercial egg-producing farms, costs and returns, 16489
congressional districts, 90th Congress, 5900
correlation of littoral transport with wave energy along shores, 7925
errata, 10954
county business patterns, 4313, 13376
electric rate book, 2251
family and property laws, summary, 10138
hydrology and ecology, Pine Barrens (series), 6408
landings, fish and shellfish, 3621, 12540
mineral industry, minerals yearbook chapter, 1401
northern, resources of yttrium and rare earths, reconnaissance, 6674
Pine Barrens, distribution of roots and rhizomes in different soil types, 6408
precipitation data, hourly, 3401
radium cases, epidemiological follow-up, progress report, 10301
Upper Silurian and Lower Devonian stratigraphy, 11167
yellow-poplar, treatments needed to regenerate, 17804
- New life for the blind, 17184
- New Mexico:
census of agriculture, 1964, State and county statistics, 10397
census of mineral industries, 1963, area statistics, 5535
climatological data, 3096
county business patterns, 12056
electric rate book, 9458
fluorspar deposits, 2540

INDEX 1967

New Mexico—Continued

- forest resource, 2335
- ground water resources of southern part of Jicarilla Apache Indian Reservation and adjacent areas, 17829
- highway safety study, Operation 66, joint engineering-enforcement project report, 1594
- mineral industry, minerals yearbook chapter, 6661
- postal map, 5393
- precipitation data, hourly, 3401
- radioactivity, airborne, 1953-56, maps, 1801
- statue of Dennis Chavez, acceptance, proceedings, 4570
- war on poverty, examination, hearings, 12420
- water supply outlook and snow surveys, 4045

- New Orleans, La., area wage survey, 11322
- New shapes for ivory towers, 7904

New York City:

- area wage survey, 16817
- City University of New York, Queens College commencement (address), 11197
- Cotton Exchange, futures trading and open contracts in cotton, wool and wool tops, 5386
- economic problems, some aspects, statistics, 15455
- fresh fruit and vegetable prices, 10203
- High Rock Nature Conservation Center, 13959
- Mercantile Exchange, futures trading and open contracts in potatoes and butter, 3367
- port, facilities maps, 9421
- port, general data, 4736
- Produce Exchange, futures trading and open contracts in cottonseed oil and soybeans, 3366
- women, counseling and vocational guidance services, 5599

New York State:

- area measurement reports, 10337
- census of agriculture, 1964, State and county statistics, 7503
- census of manufactures, 1963, area statistics, 1845
- census of mineral industries, 1963, area statistics, 5836
- climatological data, 3096
- correlation of littoral transport with wave energy along shores, 7925, 10954
- county business patterns, 4814, 12057, 14821
- electric rate book, 12511
- family and property law, summary, 10139
- landings, fish and shellfish, 3628, 14054
- mineral industry, minerals yearbook chapter, 5118
- precipitation data, hourly, 3401
- prekindergarten program, 13962
- southeastern, aeroradioactivity survey and areal geology, 1778
- southeasternmost, Upper Silurian and Lower Devonian stratigraphy, 11167
- women workers, 1670

- New York Stock Exchange, 175th anniversary observance symposium (remarks), 11058

New Zealand:

- amateur alien radio operators, authorization to operate, agreement, 17232
- artifacts, from U.S. transit of Venus expedition, 6972
- background notes, 14666
- capsule facts for Armed Forces, 17369
- health information for travel, 13078
- lights and fog signals, list, change, 1537, 7004, 11642, 18099
- livestock and meat industry, 11097
- loan of vessel, extension, agreement, 15771
- mineral industry, minerals yearbook chapter, 8359

New Zealand—Continued

- sailing directions, change, 18098
- Newark, N.J., area wage survey, 11326
- Newcomb method, *see* Mathematics.
- Newcome, Roy, jr.:
 - development of ground-water supplies at Mississippi Test Facility, Hancock County, Miss., 8183
 - ground-water resources of Pascagoula River basin, Miss. and Ala., 11190
- Newell, Homer E.:
 - astronomy in space, 8434
- NASA's space science and applications program, 12877
- paper, Feb. 28, 1967, 6913
- recommended national program in weather modification, 8450
- Newhall, Alfredo Reboredo, *see* Reboredo-Newhall, Alfredo.
- Newman, Allen L., soil survey of Kinney County, Tex., 11806
- Newman, Jerry O., economical and efficient heating system for homes, 15874
- Newport, Ohio, Mitchell and Berea sands, Lower Newport field, secondary recovery of oil by waterflooding, 14361
- Newport News, Va., area wage survey, 16816
- News digest:
 - Federal Power Commission, 3629
 - Securities and Exchange Commission, 3630
- News for farmer cooperatives, 3631
- News letters:
 - consumer relations, 3146
 - Equal Employment Opportunity Commission, 3633
 - Federal Library Committee, 3337
 - Head Start Project, 3392
 - Job Corps staff, 3454
 - medical, Medicine and Surgery Bureau, 3547
 - Navy Supply Corps, 3616
 - NBS publications, 3617
 - Paris Air Show, 8226
 - President's Council on Physical Fitness, 3634
 - rural areas development, 3841
 - State Department, 3199
 - State Technical Services Office, 3896
 - United States National Commission for UNESCO, 3956
 - USDA employee, 4012
- News releases, *see* names of departments, etc., issuing releases.
- News summary, Federal Trade Commission, 3329
- Newsletters, *see* News letters.
- Newsman's privilege, 2129
- Newspapers, microfilm, list, 8329
- see also* Press.
- Newtonian fluid, *see* Fluids.
- Nez Perce National Historical Park, general information, 1535
- Nguyen Tran Van, *see* Tran Van Nguyen.
- Niagara County, N.Y., population, special census, 16019
- Nicaragua:
 - amateur alien radio operators, authorization to operate, agreement, 7159
 - mineral industry, minerals yearbook chapter, 14331
 - records of Dept. of State, microcopy pamphlet to accompany, internal affairs, 18062
- Nicholls, Harry R., effect of charge diameter on explosive performance, 2570
- Nichols, George C., basic research, applied research and development in industry, 2761
- Nichols, Paul R.:
 - striped bass, 1076
 - tagging summary of American shad, Alosa sapidissima (Wilson) and striped bass, Roccus saxatilis (Walbaum), 8037
- Nichols, Vernon M., relief, 773
- Nichols, William O., T.I.D.E. [Testing, Information, Discussing, and Evaluating], promising demonstration project, 7923

Nichol
of m
Nickel
alloy
a
alloy
ex
q
bas
co
po
disp
ho
lo
du
lo
elec
a
Has
iden
F
min
min
pac
s
Rat
Nick
Nick
oxy
Nick
ad
Nicol
pal
132
Nicol
dee
s
fad
Nied
sta
Niel
wa
hun
153
Niel
tes
sec
Niel
17
Niger
ba
Ch
lab
Nig
mi
nu
Nigh
Co
Nigh
Nigh
81
NIH
Nike
Niko
NIM
Ho
NIN
ca
Nob
co
m
SU

Nicholson, David E., vibratory compaction of mine hydraulic backfill, 9774

Nickel:
alloys, corrosion resistance in nuclear reactor superheaters, 9797
alloys for use at cryogenic temperatures, excellent spring properties developed, 17930

base sandwich construction, edgewise compressive properties at elevated temperatures, 8102

disposal from national stockpile—
hearings, 722, 7738, 10808

law, 453
reports, 687, 936, 9117

duties, continue suspension—
law, 12182
reports, 9099, 13797

electroless plating on stainless steels and aluminum, 5202

Hastelloy-X, weld procedure produces quality welds for thick sections, 14364

identification marking, nickel and alloys, Federal standard, 16603

mineral industry survey, monthly, 3635
minerals, magnetic susceptibility, 17911

packing defects in nickel powders, USSR study, 12712

Raney, technology, 14418

Nickel-cadmium cells, see Storage batteries.
Nickel oxide, powder, photodesorption of oxygen from, 16095

Nicks, Oran W., review of Mariner IV results, 14402

Nicol, Elizabeth H., confidence in recall in paired-associate learning experiments, 13262

Nicolls, John S.:
deep and/or rapid fading phenomena in strictly line-of-sight UHF/SHF propagation, 6225

fading statistics on 212-km line-of-sight overwater radio path at 1760 MHz, 6224

Niederkorn, Donald N., college course, basic statistics, study guide, 9362

Nielson, Lyman J., inventory of research in water pollution and related fields, Columbia Basin and Pacific Coast States, 15254

Nielson, M. W., procedures for screening and testing alfalfa for resistance to alfalfa seed chalcid, 14733

Nielson, Thomas H., nomination, hearings, 17639

Niger:
background notes, 18224
Chad boundary, study, 1633

labor conditions, 1385

Nigeria:
labor conditions, 1386
mineral industry, minerals yearbook chapter, 6662

nutrition survey, 7088

Nigh, June, activities of Foreign Affairs Committee, 89th Congress, 4536

Night vision, see Sight.

Nightwear, knit, current industrial reports, 3170

NIH, see National Institute of Health.

Nike system, see Missiles.

Nikolayevsk, Russian SFSR, shipbuilding plant reviews its progress, 15368

NIMH, see National Institute of Mental Health.

NINDB, see National Institute of Neurological Diseases and Blindness.

Niobium:
columbium and tantalum alloy development, 11369

Niobium—Continued
tensile and creep-rupture properties, nitrogen effect, 10000

Nishnabotna River:
Esira, Iowa, vicinity, engineer report—
departmental edition, 13980

document edition, 13556

Nitrates, of nitrogen-containing bases, USSR study, 2458

Nitric acid, manufacturing processes, atmospheric emissions, 5428

Nitrogen:
alkali-metal vapor mixture, equilibrium thermodynamic properties, at high temperature, 16974

bases containing nitrates and perchlorates, USSR study, 2458

combustibility of materials in oxygen-helium and oxygen-nitrogen atmospheres, 5706

dilute, viscosity and thermal conductivity coefficients, 5293

effects as pressurants in nitrogen tetroxide transfer, 9547

effects of injection into boundary layer on graphite surface in high-temperature dissociated airflow, 12964

effects on—
flammability of materials in hyperbaric atmospheres, 11675

tensile and creep-rupture properties of niobium, 10000

transit temperature and market quality of western lettuce shipped in piggy-back trailers, 5644

equation of state for helium-nitrogen mixtures, 8374

fertilization, 5 years in sweetgum-oak stand, 2321

fertilizer supply, 8819

foliar nitrogen in fertilized loblolly pines, 8094

gas, zero pressure thermodynamic properties, 6636

liquid—
performance of hubless pump inducer, 6860

pure, vapor pressure, 6639

reclamation system, 18007

use in determining wear and friction of polymer laminates, 2693

megawatt dc arc heating, experimental investigation, 5205

metabolism in brain of rats under impulse accelerations, USSR study, 1167

mobilization resulting from conditions of inactivity in Macaca irus monkeys, study, 5707

nitrogen-oxygen mixture, vibrationally relaxing, centered one-dimensional unsteady expansion, 6858

requirements of normal adults residing at 4300 meters for 28 days, 14806

retention and growth of cattle, effects of protein and energy intake, 1723

stabilization in stainless steel and its effect on mass transfer in stainless steel-Cb-12r-potassium system, 12864

titanium alloys, electrorefining, 2582

washout curves, computer solution, evaluation, 15894

Nitrogen dioxide:
fumes from explosives, rapid colorimetric method for field determination, 14338

nitrogen dioxide-nitrogen tetroxide, effect on oxyhemoglobin dissociation, 13270

Nitrogen fluorides, unknown NF molecule, ground, ionized and excited states, 5181

Nitrogen isotopes:
abundance in natural gases, rel to helium genesis, 9785

(d, α) reactions on nitrogen 15, interpretation, 9873

Nitrogen oxides, production, flame characteristics causing air pollution, 8378

INDEX 1967

Nitrogen tetroxide:
disposal unit, combustion production emitted, 11515
nitrogen dioxide-nitrogen tetroxide, effect in oxyhemoglobin dissociation, 13270
transfer from one vessel to another at higher elevation, effects of helium and nitrogen as pressurants, 9847
Nitze, Paul H., nomination, hearing, 15148
Nixie tube display unit employs time-shared logic, 5149
Nixon, Roy W., growing dates in United States, 29
NLRB, *see* National Labor Relations Board.
NMR (nuclear magnetic resonance), *see* Nuclear magnetic resonance.
No laughing matter, cartoonist focuses on air pollution, 5450
No picnic, 11748
Noble gases:
chemically inert gases, effect on oxygen consumption in living tissues, 5708
chemistry, 17408
inert, effect on oxygen uptake in mice, 76
space-cabin atmospheres, physiological factors of inert gases, 9823
Nobles, E. W.:
height growth of mahogany seedlings, St. Croix, V.I., 12575
killing unwanted West Indies mahogany trees by peeling and frilling, 12573
mowing understory vegetation in young teak plantation, 12574
root pruning of mahogany nursery stock, 12572
Nobles of Mystic Shrine, *see* Ancient Arabic Order of Nobles of Mystic Shrine.
Nobo y Pividal, Rafael J., relief, 9215, 10530
Nobody wanted school desegregation, 15213
Noctilucent clouds, *see* Clouds.
Noctuidae, *see* Euseptis Hübner.
Noda, Esteban Fernández, *see* Fernández Noda, Esteban.
NODC, *see* National Oceanographic Data Center.
Noe, Frank E.:
mineral industry of Colombia, 11360
regional mineral industry review of Latin America, 12813
Noffsinger, T. L., agrometeorological progress in United States, 11900
Noise:
aircraft—
insulating houses, study, 14188
interaction of single-stage axial-flow compressor, contribution of downstream stator, 9882
multengine jet transport, noise-abatement approach profiles, NASA research, 12956
references, 4753
supersonic jets, prediction of near field noise, 14400
take-off-climbout profiles of 4-engine turbojet transport airplane, 2699
turbojet engine having choked inlet flow, measurement, 11499
upstream flow discontinuities influence on acoustic power radiated by model air jet, 6714
edge-type connectors evaluated by electrical noise measurement, 11462
finite amplitude acoustic pressure wave, define propagation characteristics, 8421
FM modulation of CW laser beam, 6710
heart rate response to, of anesthetized and unanesthetized dogs, 4180
helicopter rotor noise reduction, tip vortex core thickening, application, 4220
industrial, guide to its evaluation and control, 17152
neutron noise, symposium, proceedings, 12003
probability distribution, 1st and 2d order, measuring system devised, 17085

Noise—Continued
random excitation, rectangular plates, maximum response, 16882
rocket engines, acoustic prediction methods, 1422
shipboard, reduction and control, USSR studies, 6498
space vehicles, random noise and vibration, 17705
see also Sonic boom.
Noise-rejection coding of digital teletype communications in complex automatic hydrometeorological telemetering systems, USSR, 8275
Noise suppressors, acoustic liners to suppress screech in rockets, 6870
Noland, Michael C., high-velocity metalworking, survey, 11428
Noll, Richard B., theoretical dynamic analysis of landing loads on vehicle with tricycle landing gear, 14472
Nolo contendere and private antitrust enforcement, hearings, 13875
Nomenclature, automatic electronic test and checkout, definition of terms, military standard, 7861
Nominations, Academy of Medical Sciences, USSR, 5022
see also names of persons.
Nomography (mathematics):
Army manpower policy evaluation, 4227
Nonappropriated funds, instrumentalities act, regulations for compensation, 1018
Noncaloric sweeteners, their position in sweetener industry, 10916
Noncash items, collection, regulation, revocation, 14043
Nondestructive test method accurately sorts mixed bolts, 2679
Nondestructive testing, trends and techniques, 11430
Nonfat dry milk, *see* Milk.
Nonferrous castings, *see* Castings.
Nonferrous metals, *see* Metals.
Nonlinear equations, *see* Equations.
Nonlinear flexural vibrations of thin-walled circular cylinders, 14482
Nonlinear theories, space flight control systems, nonlinear, 15498
Nonmagnetic, explosive actuated indexing device, 11496
Nonmetals:
industries—
employment and injuries, 8338
Federal metal and nonmetallic mine safety act, report, 647
injury experience, 9756
review, minerals yearbook chapter, 6689
technologic trends, minerals yearbook chapter, 5136
materials, Federal Item Identification guides for supply cataloging, supplements, 3291
minor, minerals yearbook chapter, 8371
Nonmetropolitan delinquency, action program, 11906
Nonprofit organizations:
and their employees, social security, how it works, 5505
employees disseminating information that promotes U.S. interest, permit naturalization, 17606
food donation programs, audit extent, GAO report, 8149
loans for senior citizens housing, 2383
pension plans, tax treatment, report, 15093
Nonprofit-sponsored housing for open occupancy, 8202
Non-proliferation treaty, why?, 15926
Nonwhite population:
educational attainment of women, fact sheet, 13185
women workers, fact sheet, 5601
Nooksack Indians, judgment funds, disposition, law, 379

Nordtredt, Kenneth, Jr., manual space navigation, theory, 14390
 Norepinephrine, decabornane-mediated norepinephrine depletion, reversal by methylene blue, 1730
 Norfolk, Va., area wage survey, 16816
 Norfolk County, Mass., Norwood quadrangle geology, 6389
 Norfolk-Island-pine, *see* Pine.
 Norfolk Naval Shipyard, employees, relief, report, 4587
 Norloff, Paul A., establishing business in United Kingdom, 17476
 Norman, Edgar C., summaries of fast reactor fuels and materials development programs, 4238
 Norman, Leland C., Gemini land landing system development program, 6901-2
 Norris, John D., conical pressure probe performance, 5230
 Norris, L. Fredrick, submicron powder blending methods for dispersion alloys, 6880
 North America:
 chalcid flies, revision of genus, 8536
 civil divisions, geographic report, 17223
 east coast—
 lights and fog signals, list, changes, 5331, 9072, 14578
 1968 tide tables, 12119
 geology, abstracts, 2980
 Hymenoptera of America north of Mexico, synoptic catalog, 7267
 livestock, foot-and-mouth disease menace, control and eradication program, 7252
 mineral industry, regional review, minerals yearbook chapter, 11868
 northeastern Hemictheridae and Trachyleberidae (Ostracoda), classification and distribution, 8174
 Pacific Coast—
 surface water temperature and density, 17466
 tidal current tables, 16087
 soldier fly larvae in America north of Mexico, 6957
 west coast—
 lights and fog signals, list, changes, 1537, 7004, 11642, 18099
 tide tables, high and low water predictions, 7555
 North Atlantic slope basins, *see* Atlantic States.
 North Atlantic Treaty Organization:
 Atlantic alliance—
 current views, 10838
 unfinished business, 6108
 common infrastructure program, U.S. participation, investigation, report, 2034
 economic aide (remarks), 10124
 emergency war surgery handbook, Spanish edition, 9368
 headquarters of Deputy Commander, Allied Forces in Europe, agreement with France, 7170
 parliamentarians' conference, 1966, report of U.S. delegation, 9311
 Soviet view (speech), 9317
 status of forces treaties, international law studies, 11683
 North Carolina:
 area measurement reports, 17422
 Beaufort Inlet to Bogue Inlet, hurricane survey, engineer report—
 departmental edition, 2203
 document edition, 1996
 Bogue Inlet to Moore Inlet hurricane survey, engineer report—
 departmental edition, 2204
 document edition, 1997
 census of agriculture, 1964, State and county statistics, 16037
 census of manufactures, 1963, area statistics, 1846
 census of mineral industries, 1963, area statistics, 5837

North Carolina—Continued
 climatological data, 3096
 coastal plain, tobacco farms, commercial costs and returns, 13943
 county business patterns, 4315, 13377
 landings, fish and shellfish, 3638, 17771
 mineral industry, minerals yearbook chapter, 5119
 minor elements in alluvial magnetite from Inner Piedmont belt, 8172
 Ore Knob copper deposit, 15310
 Outer Banks, dune stabilization with vegetation, 16523
 precipitation data, hourly, 3401
 soil survey laboratory data and descriptions, 18216
 textile jobs for non-whites, etc., opportunities, 13994
 timber resource survey, 2338
 North Cascades National Park:
 establish—
 hearings, 15163
 report, 17631
 North Central Forest Experiment Station, publications, 1966, list, 14086
 North central region, *see* Central States.
 North Dakota:
 area measurement report, 8928
 census of agriculture, 1964, State and county statistics, 10393
 census of mineral industries, 1963, area statistics, 4294
 climatological data, 3096
 county business patterns, 1868, 12058
 District Court, Williston, additional place, report, 12395
 electric rate book, 4777
 mineral industry, minerals yearbook chapter, 5380
 postal map, 5394
 precipitation data, hourly, 3401
 public lands, use of income for schools, etc—
 law, 12177
 reports, 10733, 12262
 sedimentary rocks, chemical composition, 14172
 women, new horizons, conference report, 5606
 North Korea, *see* Korea.
 North Little Rock, Ark.:
 area wage survey, 1361, 17896
 population, special census, 10366
 North Nashua River:
 and tributaries, engineer report—
 departmental edition, 4734
 document edition, 4569
 North Pacific Ocean, *see* Pacific Islands.
 North Sea:
 eastern shores, sailing directories, change, 6999
 lights and fog signals, list, changes, 5334, 11644
 North Vietnam, *see* Vietnam.
 Northeast (U.S.):
 dairy farms, commercial, costs and returns, 16488
 increasing water yield by management of forested watersheds, 14136
 Northeast Corridor transportation project, design for impact studies, 1938
 power failure of Nov. 9 and 10, 1965—
 analysis and recommendations, 14030
 final report to the President, 14030
 hearings, addendum, 2053
 studies of task groups on power interruption, 14030
 pulpwood production, 4857, 8122, 14146, 17807
 soil and water conservation research, 38
 wildlife refuges, 1078
 Northeastern Forest Experiment Station:
 annual report, 17800
 forest-inventory data-processing system, 11134

INDEX 1967

- Northeastern Forest Experiment Station—Continued
Forestry Science Laboratory, Morgantown, W. Va., purpose, work, etc., 14084
publications, list, 11135
Northern Forest Fire Laboratory, forest fire research since 1960, publications, 8058
Northern Hemisphere, *see* Hemisphere, Northern.
Northern Utilization Research and Development Division:
publications and patents, list, 7253
publications list, new crops, 13199
Northfield School, East Northfield, Mass., carillon, duty-free entry, 7650, 14884, 16353
Northwall, Carolyn L., personnel management and training, supplement 1, 10230
Northwest (U.S.):
balsam woolly aphid, infestation characteristics, 4852
current discharge at selected stations, 3907
forest industries, production, prices, employment, and trade, 3774
forest insect conditions, 8063
forested lands, development (remarks), 8210
how to see, 1658
lead-zinc industry, analysis, 11352
month-end storage in major reservoirs, 3907
national forests, 15279
nuclear power and Northwest (remarks), 1817
Pederson process adaptation to ferruginous bauxites, 9788
precipitation and temperature, monthly, 3669
precipitation, probable maximum, 5594
range-plant symbols, list, 14141
river temperatures, 3839-40
search for better kinds of trees, Wind River Arboretum, 14147
small business regional export industries and institutions over next decade, potentials and problems of developing, hearings, 17678
training centers and programs, provide central location, hearings, 15156
water, new reports by Geological Survey, 11170
water resources—
annual peak discharge at selected gaging stations, 16650
summary, 2362, 3670, 17822
weekly runoff report, 3671
Northwest Atlantic Fisheries Convention, multilateral understanding, protocol, 2896
Northwest Regional Services Corporation, create, hearings, 15156
Northwest Shellfish Sanitation Research Planning Conference, proceedings, 15683
Norway:
amateur alien radio operators, authorization to operate, agreement, 15784
background notes, 11818
capsule facts for Armed Forces, 15914
infant mortality problems, 17167
lights and fog signals, list, changes, 5335, 8572
mineral industry, minerals yearbook chapter, 11363
mutual defense assistance, agreement, 2027
northwest and north coasts, sailing directions, change, 14573
southwest coast, sailing directions, change, 7000
Northwestern University, triaxial apparatus and rheogoniometer, duty-free entry, 617, 7653, 14889, 16357
Northwind (vessel):
documentation with coastwise privileges, 14892, 15065
Norton, Elinor F., chemical yield, determinations in radiochemistry, 18331
Norton, James J., ternary diagrams of quartz-feldspar content of pegmatites in Colorado, 1111
Norwalk River and Valley:
basin, Conn. and N.Y., engineers report—departmental edition, 17733
document edition, 17616
Norwood, Janet L., wages in Japan and United States, 16827
Norwood, Joseph, Jr., viscous drag effect on performance of coaxial plasma gun, 5267
Norwood, Mass., geology of quadrangle, 6389
Nose, incidence of diseases in 400 space and test pilot candidates, 14781
Nosology, training unit for nosologists, description of diseases frequently reported on death certificates, 7095, 8656
Notes, *see* Treasury notes.
Notice to aviators:
United States Navy, 3640
index, 9967
Notice to mariners, 3641, 7007
chart correction list, 5337, 14582
Great Lakes and tributary waters, 3642, 9006
Notice to trade, aluminum forgings, 10332
Notices of judgment, food, drug, and cosmetic act, 3643-44
Notices to airmen, 3022, 10978
International notams, 3437, 9445
Notifiable diseases, *see* Contagion and contagious diseases.
Novak, Arthur P., radiation pasteurization of Gulf shellfish, 13341
Noxious and Obscene Matters and Materials Commission, create, reports, 2089, 10755
Noxious plants, *see* Weeds.
Noxubee National Wildlife Refuge, general information, 2278
Nozzles:
convergence, with uncooled pipe inlets, heat transfer investigation, 17005
exhaust, effects of chemical kinetics on performance, computer program for determining, 15575
fabricated from mild tool steel, use for grit blasting, 6762
isotropic plug, off-design performance, 6892
multilayer refractory, produced by plasma-spray process, 6774
nuclear rocket type, convectively cooled, design and evaluation, application of digital codes, 5269
regenerative, used in cold-flow nuclear rocket test facility, cooldown characteristics, 11500
regeneratively cooled, for tungsten water-moderated nuclear rocket system, 2729
two-dimensional, investigation of secondary jets for hypersonic control application, 5266
NPPI, *see* Poultrey.
NPS, *see* National Park Service.
NPS national prisoner statistics series, 5409, 17128-129
NRAB, *see* National Railroad Adjustment Board.
NRL, *see* Naval Research Laboratory.
NSLI, *see* Life Insurance.
NSRDS, *see* National Standard Reference Data System.
NSSL, *see* National Severe Storms Laboratory.
NTC, *see* National Teacher Corps.
NTDS, *see* Naval Tactical Data System.
Nuclear clocks, *see* Atomic clocks.
Nuclear Data, Information Center on, *see* Information Center on Nuclear Data.
Nuclear defense design for architects and engineers, 16053
Nuclear energy, *see* Atomic energy.
Nuclear engineering:
coolants for nuclear power engineering installation, USSR study, 1260
education activities, guide, 5796

Nuclear explosions:

- Plowshare program—
 - apparent-crater studies, final report, 13342
 - civil, industrial, and scientific uses, bibliography, 5787
 - clouds, lidar observations, final report, 17397
 - concrete stem for access hole, design, etc., 17395
 - engineering properties of nuclear craters, 17398
 - geologic and engineering properties investigations, final report, 17394
 - multiple row charge blast-wave observations at long range, 1798
 - preshot geophysical measurements, 15962
 - Project Handcar, and surface accelerations, 5782
 - structures instrumentation, 17396
 - underground detonations, fallout characteristics, 7426
- Project Dribble, Salmon event, earth vibrations from nuclear explosion in salt dome, 8911
- Project Pre-Schooner II, technical director's summary report, 5781
- threshold distances for retinal burns from low-yield detonations, 69
- underground—
 - industrial, problems, 5757
 - radioactive fallout and fractioning of isotopes, conditions of formation, 1268
 - seismic velocity determination and distance measurements in salt dome, 1808
 - timing and firing, 1810
 - vent-gas treatment plant, 1809
- Nuclear explosives, *see* Atomic blasting.
- Nuclear fission, nuclear safety, critical parameters of fissionable materials systems, USSR book excerpts, 15408
- Nuclear fission waste, *see* Radioactivity.
- Nuclear fuel, *see* Reactor fuels.
- Nuclear fusion:
 - journal of plasma physics and thermonuclear fusion, translations, 1774-75, 7417
 - neutron production by fusion in class of anisotropic plasmas, 5347
 - plasma physics and controlled nuclear fusion research, translated Russian papers, 5756
 - selected articles, translations, 5755
- Nuclear geophysics, instruments, production, USSR study, 8265
- Nuclear magnetic resonance:
 - organic loading of charcoal, method for determining, 14597
 - sensitive recording NMR ultrasonic spectrometer, 2744
 - spectrometer, improved, 14433
- Nuclear ordnance, *see* Atomic ordnance—Fire control (gunnery).
- Nuclear physics:
 - reactor shielding physics, problems, 12972
 - recent research activities, Universities of Basel and Fribourg, Switzerland, 5011
- Nuclear power, *see* Atomic energy.
- Nuclear power plants, *see* Nuclear reactor power plants.
- Nuclear powered ships:
 - commissioning of nuclear submarine Sturgeon (remarks), 7439
- N.S. Savannah—
 - layup, hearings, 12307
 - liability during private operation, agreement with Republic of China, 15799
 - operation, continue, hearing, 13853
 - visit to Hong Kong, agreement with Great Britain, 15795
- submarines—
 - atmosphere, purification and control, chemical research status, annual progress report, 17084

Nuclear powered ships—Continued

- submarines—continued
 - propulsion equipment, procurement under Public law 87-653, by Navy Dept., GAO report, 16674
 - Nuclear radiation, *see* Radiation.
 - Nuclear reactions, controlled thermonuclear research, AEC policy and action paper, 1806
 - Nuclear reactor power plants:
 - Beloyarskaya atomic electric power station imeni I. V. Kurchatov, radiation situation in area, USSR study, 15406
 - boiling water reactor nuclear steam supply systems with capacities to 10,000 MWt, feasibility study, 17391
 - BONUS boiling nuclear superheater power station, final hazards summary report, 5784
 - BONUS core development program, final report, 8901
 - combination nuclear power desalting project—
 - hearings, 7749, 7813
 - laws, 375 10487
 - reports, 675, 6078, 7731, 9125
 - coolants for nuclear power engineering installations, USSR study, 1260
 - desalting and energy development and utilization, policy considerations, 15969
 - industry and government, complementary roles (remarks), 131
 - Northwest and nuclear power (remarks), 1817
 - nuclear power plants, descriptions, locations, etc., 7443
 - nuclear power 2 years after Geneva (lecture), 133
 - operating and safety experience analysis, 12007, 13327
 - small plants—
 - design, construction, and operating experience, 5769
 - general economic assessment, 12006
 - industrial expression of supply and demand considerations, 12005
 - superheat project, final report, 5773
 - Nuclear reactors, *see* Reactors (atomic).
 - Nuclear rockets, *see* Rockets.
 - Nuclear safety, quarterly technical progress review, 3645
 - Nuclear science:
 - abstracts, 3646
 - Government-wide index, 3381
 - index, 3647
 - cumulative, corporate authors, 12024
 - cumulative report number, with public availability citations, 7440
 - cumulative, subjects, 15971
 - subject headings used, 128
 - subject scope, 7427
 - Atoms in Action Nuclear Science Demonstration Center, operations (remarks), 5917
 - conferences, index, 127
 - education activities, guide, 5796
 - future outlook for applications (remarks), 17404
 - nuclear science and technology for ceramists, proceedings of symposium, 12982
 - progress and application to basic world-wide problems (remarks), 15974
 - series, 1793, 13331
 - year of progress (remarks), 132
- Nuclear warfare, *see* Atomic warfare.
- Nuclear weapons, *see* Weapons.
- Nucleate boiling:
 - convection, conduction, and evaporation, assessment, 9907
 - heat transfer with electrical field, 13334
- Nucleation, *see* Phase studies.
- Nuclei:
 - inelastic electron scattering, calculation, 12019
 - morphology of interphase nucleus, USSR study, 12747

INDEX 1967

Nucleic acids:
 bibliography, 8534
 metabolism of liver in experimental atherosclerosis, USSR study, 1275
 methods of determination, isolation and fractionation, Bloc countries hold symposium, 6487
Nucleoli, see Cells.
Nuclides, see Radionuclides.
Nueces County, Tex., civil rights status of Spanish-speaking Americans, 14848
Numbering systems:
 part and drawing, use by manufacturers, 7847, 10886
 run, for use with data recorders, 12918
Numerical calculations:
 calculate components of earth's magnetic field, NEILLAC-N computer program, 17083
 characteristics method application to uni-dimensional problems in gas dynamics, 14500
 characteristics of gas flowing axially through constricted arc, 12955
 computer program calculates monotonic maximum likelihood estimates using method of reversals, 11465
 data frame readout system used in testing telemetry systems, 12901
 determination of electron temperature from X-ray continuum radiation emitted from high temperature plasmas, 11681
 diffraction of normal shock wave by sphere and for transient flow, 17015
 economic, for solving problems, Rumanian studies, 1309
 experiments in plasma physics, 1791
 how to compute injury rates, 9701
 inelastic electron scattering by nuclei, 12019
 method for determining heating rates from thick-calorimeter data, 8486
 methods for estimating geochemical abundance, 9573
 Monte Carlo program for Doppler coefficients, 18300
 naval weather service computer products manual, 15618
 satellites, theory, in Brendel's coordinates, 11545
 Schrödinger equation, numerical solutions, accurate and stable, 17090
 study compares methods for numerical solution of ordinary differential equations, 1463
 three-dimensional calculation of fuel burn-up in water cooled, water-moderated power reactors, 16740
 viscous drag effect on performance of coaxial plasma gun, 5267
Numerical integration, see Integration (mathematics).
Numerical lists and schedule of volumes of reports and documents, 89th Congress, 2d session, 10036
Numerical weather forecasting methods used in USSR hydrometeorological service, 1184
Nurse Corps, Navy:
 candidate program, 17080
 you, your country, and Navy Nurse Corps, 5342
Nurseries, see Day care of children.
Nurseries (horticulture):
 nursery products, bibliography on marketing, 1708
 seedbed density affects size of 3-0 green ash stock, 14095
Nursery schools, see Day care of children.
Nurses and nursing:
 aged, nursing care, annotated bibliography, 10050
 community planning in D.C. metropolitan area, source book, 18158
 coronary care units, publications, films, and other teaching aids, 5452

Nurses and nursing—Continued
 elementary rehabilitation nursing care, 1571
 employees in nursing and personal care homes, number etc., statistics, 7098
 examination announcement, amdt., 5927, 8989
 expenditures in small health agencies, costing procedures, 5437
 Hurricane Betsy, nurses serve, 18168
 Indian and Alaska native health program, nurses, examination announcement, 10436
 Indian health program, examination announcement, discontinuance notice, 10423
 Indians, nursing careers among, 18184
 national disaster, role of licensed practical nurse, 11733
 practical nursing in VA, forward step in career, 10127
 professional nurses—
 examination announcements, 1917, 10416, 17456
 discontinuance notice, 1920
 inactive, refresher programs, guide for courses of study, 10060
 traineeship program, 2834
 PHS short-term training courses, 8653, 17162
 schools offering traineeships for full-time academic study, 5464, 15710
 psychiatric-mental health trainee stipends—
 availability, etc., 10058
 institutions offering for graduate and undergraduate education, 11760
 public health nurses number, educational preparation, etc., United States, Puerto Rico, Virgin Islands and Guam, 17155
 Public Health Service, careers in nursing, 10042
 so you want to be a licensed practical nurse, 15206
 special research fellowships, predoctoral and postdoctoral, general information, 15711
 supply and need, statistics in brief, 5451, 15701
 training act of 1964, student loan program, information, 11747
 training improvement, project grants, guidelines, 18164
see also Nurse Corps, Navy.
Nursing assistants, see Hospital attendants.
Nursing homes:
 and related facilities, extended care facility under medicare, what it means to you, 7125
 and title 6 of civil rights act of 1964, 1584
 care of veterans in Alaska and Hawaii, eliminate certain requirements, report, 6007
 care provided to welfare recipients, guidance to States in establishing rates, GAO report, 17811
 chronic illness among residents of nursing and personal care homes, May-June 1964, U.S. statistics, 11764
 employees in nursing and personal care homes, number etc., statistics, 7098
 extended care benefits after hospitalization under medicare program, 2865, 11796
 extended care facilities, providers of services under health insurance for the aged, directory, 15738
 extended care facility manual, medicare program, 5504, 7120
 FHEA-assisted program, 1965 survey, 6435
 health record system, organizational guide, 7072
 hospital and medical facilities, Hill-Burton program, equipment planning guide, 15691

Nursing homes—Continued

- inquiry into practices in providing care to old-age assistance recipients in Cleveland, Ohio, area, GAO report, 8150
- minimum property standards, 8203
- open every door, Nation's goal for compliance with title 6 of 1964 civil rights act, 13183
- practices in providing care for welfare recipients in California, GAO report, 2354
- prevalence of chronic conditions and impairments among residents of nursing and personal care homes, 14639
- under Fair labor standards act, as amended, 1663
- VA nursing home care programs, operation, hearings, 15050
- Nursing School, Freedmen's Hospital, *see* Freedmen's Hospital School of Nursing.
- Nusbaum, William J., evaluation of radial-inflow turbine over range of Reynolds number, 6881
- Nussebaum, William, and wife, relief, 314, 817
- Nutrition:
- biochemistry of protein nutrition, USSR book review, 15405
 - bite-size food fed to man in oxygen-hellum atmosphere, evaluation, 83
 - child nutrition act of 1966—amend, hearings, 9139
 - closing nutrition gap, 15871
 - law, 373
 - report, 663
 - facts, 18162
 - good breakfast starts a good day, 14745
 - mineral nutrient requirements of *Chlorella sorokiniana* in continuous pure culture, 14779
 - nutrition program news (periodical), 3648
 - nutritional status of preschool children, suggested guidelines for evaluation, 17444
 - pattern change, effects on physiological functions in normal persons, complex investigations, USSR study, 11281
 - survey, Fort Huachuca, Ariz., 14807
 - survey, Republic of Nigeria, 7088
 - USSR research, 1256, 2459, 6511
 - USSR studies, 4987
- Nutrition Laboratory, *see* Army Medical Research and Nutrition Laboratory.
- Nutritionist, public health, examination announcement, amendment, 16065
- Nuts:
- foreign agriculture circulars, 3345
 - tree nuts—
 - production and marketing research, bibliography, 13233
 - production, use, value, by States, 4145, 14700
- Nuts (machinery), *see* Bolts and nuts.
- NYC, *see* Neighborhood Youth Corps.
- Nyland, Ted W., analysis of liquid-metal quality measurement techniques, 12951
- Nylon:
- phenolic, ablative performance, effect of composition, etc., 9889
 - phenolic, low-density ablation material, thermophysical properties, 14377
- Nystagmus:
- eye-movements and subjective turning responses to 2 durations of angular acceleration, 15980
 - nystagmic eye movements, influence on adaptation of interruption with opposing stimuli, 7447
 - responses to angular acceleration and to bilateral caloric stimulation following unilateral caloric habituation, 10322
 - visual fixation effects of brief periods on nystagmus and sensations of turning, 15981

O

- O.A.R., *see* Aerospace Research Office.
- O.A.S.D.I., *see* Old-age, survivors, and disability insurance.
- O.A.S.I. series, 1605-6, 2861-65, 5505-13, 7122-28, 8688, 10085, 11795-797, 15739
- Oake unit, *see* Missouri River Basin project.
- Oak:
- black oak, California, increasingly valuable species, bibliography, 14105
 - bur and red oak, effect of gibberellic acid spray on seedlings, 11129
 - chestnut, suppressed, annual growth, basis for hydrologic inference, 11171
 - cordwood yields from thinnings in young oak stands in Missouri Ozarks, 2307
 - gambel, soil moisture depletion, 4831
 - green, lumber, presurfacing to reduce surface checking, 2301
 - growth retardation under 3 species of oaks, observations, 11130
 - nitrogen fertilization, 2321
 - pin oak flat, converting to pine, 14121
 - red oaks—
 - clearwing borer, 2326
 - coarse feed sawing, limited study, 11111
 - redcedar mixtures established in poor oak-hickory forests, 8073
 - scrub oak areas, tree planting after site preparation with heavy equipment, 8112
 - shrub live oak, control with helicopter-applied herbicides, 14111
 - stands, regeneration in southern Appalachia, 12578
- Oak Park, Ill., population, special census, 10377
- Oak Ridge, Tenn., hydrologic data for area, 16704
- Oak Ridge National Laboratory:
- conceptual design of 250 MGD desalination plant, 2396
 - dedication of transuranium research facilities (remarks), 1815
 - master analytical manual—
 - indexes, 7428
 - supplement, 7420
- Oakland, Calif., area wage survey, 9744
- Oakley Dam and Reservoir, Sangamon River, Ill., designate as Henry Bolz Dam and Reservoir, report, 2100
- OAR, *see* Aerospace Research Office.
- OAR Research Applications Conference, proceedings, 7337
- OASDHI, *see* Old-age, survivors, disability, and health insurance.
- OASDI, *see* Old-age, survivors, and disability insurance.
- OASI series, 1605-6, 2861-65, 5505-13, 7122-28, 8688, 10085, 11795-797, 15739
- Oaths, requirement in D.C. motor vehicle title transfers, eliminate, report, 12383
- Oats:
- futures—
 - commitments of traders, 3112
 - trading and open contracts, 3368
 - Oberholtzer, Betty L., publications of National Bureau of Standards, 9936
 - Oberndorfer, Wolfgang J., equations for thermoelastic and viscoelastic cylindrical sandwich shells, 1436
- Obesity:
- and health, source book of current information, 1555
 - body volume of adult men, 14780
 - Objective numerical prediction out to 6 days using primitive equation model, test case, 12479
 - Objectives for Federal funds, 13957
 - Objects affecting navigable airspace, 15238
 - Oblanas, John W., lidar observations of Pre-Gondola I clouds, 17397
 - Oblate spheroids, *see* Spheroids.
 - Obolensky, Serge, Greek, basic course, 14677

INDEX 1967

OBR series, 1941-47, 4431-46, 5951-56, 7573-80, 8688, 9013-20, 10458-463, 12132-138, 13455-466, 14880-882, 16100-108, 17474-482

Obraztsov, Nicholas S.:
neotropical microlepidoptera, revision of genus—
Idolatteria, 8538
Pseudatteria, 6944

O'Brien, Gerald D.:
addresses—
Jan. 5, 1967, 5370
Feb. 16, 1967, 7031
Aug. 5, 1967, 14605
Aug. 8, 1967, 14603
Aug. 9, 1967, 14604

O'Brien, Lawrence F.:
addresses, etc.—
Oct. 26, 1966, 1556
Oct. 31, 1966, 1555
Mar. 3, 1967, 7106
Mar. 9, 1967, 7038
Apr. 12, 1967, 8675
May 17, 1967, 11691
May 25, 1967, 11697
May 29, 1967, 11690
June 23, 1967, 13049
July 14, 1967, 14610
Aug. 30, 1967, 15643
Sept. 22, 1967, 17109
Oct. 2, 1967, 17110
Oct. 24, 1967, 18135

O'Bryan, Thomas C., Langley lunar landing research facility, 6375

Obscene matter:
pandering advertisement in mails, not desired by addresses, prescribe mailing amend U.S. Code, hearing, 10671, 17608
return of obscene mail, amend U.S. code, hearing, 10671, 17608

Obscenity and Pornography Commission:
create—
hearing, 12296
law, 16145
report, 14933

Observatories, *see* Astronomical observatories—*also* names of observatories.

Occupational analysis, *see* Job analysis.

Occupational diseases:
labor hygiene and occupational diseases (USSR periodical), translations, 6510
State compensatory provisions, 8337
USSR studies, 1313

Occupational mental health notes, 17154

Occupational therapists, Veterans Administration hospitals and clinics, nationwide, career information, 14712

Occupational therapy students, four educational opportunities, 5899

Occupations:
Air Force, occupational handbook for airmen, manual for guidance counselors, 15902
America's occupational manpower requirements, 1964-75, study, 6603
Army, recruiting & career counseling journal, 3812
back-to-work symposium for women who want to resume careers, 8798
career opportunities—
accountants, economists and transportation analysts with Civil Aeronautics Board, 17448
Accounts Bureau, Treasury Department, 5576
agricultural commodity grader, 9356
Air Force jobs that count, 10223
Army crafts program, 7382
Army, pamphlet, 11989
attorneys with Civil Aeronautics Board, 16045
auditing, reasons for starting with Health, Education, and Welfare Dept., 8195

Occupations—Continued
career opportunities—continued
Coast Guard engineering team, not for ordinary engineer, 218
college graduates with Army Department, 8877
commissioned officer in Coast Guard Reserve, 10442
corrective therapists, Veterans Administration, hospitals and clinics, nationwide, 15816
Defense Contract Audit Agency, auditors, 9365
digital computer systems trainee, 6454
DSA civilian program for automatic data processing, 13910
estate tax examiners, 2404
Farmers Home Administration, 1036
Federal Credit Unions Bureau, accountants, 6246
Federal Water Pollution Control Administration, your career and clean water for America, 8012
Food and Drug Administration—
clerk typists and stenographers, 8046
investigator, 11095
forestry, 5654
health careers, jobs happen, careers don't, 15693
health workers in Peace Corps, 5377
Housing and Urban Development Department, job where the action is, 4907
Immigration and Naturalization Service
immigration patrol inspector, 10435
Internal Revenue Service—
international taxation, 8217
secretarial, 11223
tax work, 2400
international agriculture, new careers, 13234
liberal arts graduate in Peace Corps, 5374
librarians in Federal service, 4404, 10417
management analyst development program, 9586
math & science teachers in Peace Corps, 5380
National Aeronautics and Space Administration, 11574
National Labor Relations Board, labor-management relations field examiner, 2748
oceanography, 1536
overseas, State Department, secretaries, 8722
Post Office Department, research and engineering, 7042
professional accountants in Federal agencies in Washington, D.C. area, 4393
programmers, IRS, 6459
public health advisors and analysts, 10064
Public Health Service, 11721
nurses, 10042
pharmacist, 15676
physical therapist, 18155
scientists, 8652
veterinarian, 18156
research forestry, research forester, and forest products technologist, 4394
revenue officer, 2409
social security, 14645
Soil Conservation Service, 1705, 5655
Sport Fisheries and Wildlife Bureau—
fish conservation, 6351
game management agent, pilot, 6345
sports and recreation in Peace Corps, 5384
State Department—
communications and records, worldwide assignments, 5524
secretaries, stenographers, typists, 11831
teaching in Peace Corps, 5385

Occupations—Continued

career opportunities—continued
 Treasury enforcement agent, 5575
 typists and stenographers, Army Department, 8896
 Veterans Administration, practical nursing, 10127
 veterinarians, Agriculture Dept., 5657
 wildlife conservation, 6352
 women's work in Forest Service, 13231
 career planning booklet, 6162
 dictionary of occupational titles—
 physical demands, working conditions, and training time data, supp., 6205
 suffix codes for jobs defined, 9417, 10946
 disabled workers, occupational characteristics by disabling condition, 7079
 Federal position classification plan, 3389
 girls, expanding opportunities, their special counseling needs, 11909
 hazardous job analysis, conducting, 9697
 Marine Corps—
 occupational opportunities, 16842
 outlook for your future as marine, 15461
 Navy, enlisted programs handbook, 8581
 Negro's occupational progress, 16829
 occupational groups and series of classes, handbook, 16079
 occupational safety aids, 6601, 9697-9720, 12766-16798-809
 occupational safety charts, 9721-27
 opportunities for girls in crafts and trades (address), 8796
 outlook, quarterly, 3649
 professional, technical, and kindred employment by counties of U.S., 1960, map, 1891
 publications, price list, 17133
 selected wage indexes, long-term trend data for metropolitan areas, 5059
 services for the blind, salaries, 2499
 so . . . you want to be (series), 15205-207
 survey data, computation of group job descriptions, 11951
 wage trends for occupational groups in metropolitan areas, 17901
 see also Work—also names of occupations, industries, etc.
 Ocean:
 acoustics, USSR study, 6587
 atoms and the ocean, role of nuclear energy in exploring, etc., radionuclides in ocean, 15978
 exploration (remarks), 1956
 exploring potential, USSR study, 1165
 freight rates on military cargoes by U.S. vessels reduced, hearings, 4552
 inner space, sea of opportunity, 6186
 International Council for Exploration of Sea, convention, report, 6064
 measuring ocean bottom irregularities, USSR study, 9650
 microorganisms of land air mass as it traverses ocean, 68
 new knowledge from global sea, programs and mission of ESSA's Institute for Oceanography, 16537
 pollution by oil—
 international control, report, 16234
 international convention for prevention, amendments
 implementing, hearing, 745
 text, 5542
 research development of underwater electronic robot, USSR study, 6568
 science and the sea, 11649
 sound scattering, USSR articles, 9627
 U.S. life lines, 8574
 United States and world ocean (lecture), 1602
 volume, monostatic acoustic scattering, 13034

Ocean—Continued

volume sound scattering and measurement of acoustic characteristics of scattering layers, USSR study, 1166
 see also Sea ice—Seamounts—Waves.
 Ocean cruises, see Cruises.
 Ocean currents:
 deep water isotopic current analyzers, 13328
 longshore current data, compilation, 10952
 measuring with EMIT while ship is turning, theoretical foundations of method, USSR study, 1170
 see also Gulf Stream.
 Ocean Delight (fishing vessel):
 documentation with coastwise privileges, report, 10760
 Ocean Island, see Gilbert and Ellice Islands.
 Ocean stations, see Weather stations.
 Ocean temperature:
 surface temperature gradients observed in marine areas receiving warm water discharges, 14070
 surface water Pacific Coast, 17466
 Ocean transportation, see Shipping.
 Oceania:
 agricultural data book, 10926
 agricultural situation—
 midyear review, 16492
 1966 review, 1967 outlook, 12455
 contributions to hydrology of Asia and Oceania (series), 11187
 market indicators, 9013
 Oceanographer (ocean survey ship):
 voyage around the world, welcome aboard, visitor's guide, 7659
 Oceanographic Data Center, National, see National Oceanographic Data Center.
 Oceanographic Office, see Naval Oceanographic Office.
 Oceanography:
 aquatic sciences, graduate educational grants, 1967-68 academic year, 1077
 atlas for Tampa Bay, Fla., and adjacent waters of Gulf of Mexico, 12545
 atlas of Indian Ocean, interpolated values of depth, salinity, etc., 15624
 atlas of July conditions in northeast Pacific Ocean, 8041
 biological, of eastern tropical Pacific, 8038
 career advantages at Naval Oceanographic Office, 1536
 computer programs, 14570
 determining depth of zero surface, USSR study, 4952
 East Siberian Sea, July-Sept. 1964, turbidimetric observations, 9988
 Ellisha Kane, oceanographic ship (USN), general information, 14568
 ESSA's exploitation of sea's resources by use of McArthur coastal survey ship, 10970
 films, catalog, 2770
 foreign monographs, USSR, study, 1176
 inner space, sea of opportunity, 6186
 Labrador Sea in vicinity of Hudson Strait, 10445
 legislation, chronology of related events, 4550
 marine science affairs, year of transition, report, 9948
 methods and instruments for marine research, USSR study, 6501
 National Oceanographic Data Center—
 publications, 2270, 6996-97, 8568-69, 11629-631, 14570, 15624
 quarterly accessions, 3636
 national program, 1042
 naval weather service computer products manual, 15618
 Navy ocean science program, accomplishments and prospects, 14598
 North Atlantic Ocean Station Charlie, observations, 10444
 observations, tropical Atlantic Ocean, Equatorial III, data report, 8569

INDEX 1967

Oceanography—Continued
oceanographic and hydrographic systems for training, 11670
oceanographic reports, 10444-445
oceanographic tables, handbook, 13024
oceanographic vessels of the world, 8568
oceanography and engineering (address), 12116
opportunities, 8682
Polar Scientific Research Institute of Sea Fisheries and Oceanography, USSR, activities, 6551
Project Sealab, 45-day undersea saturation dive, report, 11669
research, Mediterranean Marine Sorting Center, agreement with, Tunisia, 2031
sea grant colleges and program act—law, 402
reports, 632, 679
ship operating—
1967 schedules, 7957
1968 schedules, 17753
Soviet oceanographic ship conducts marine research in Pacific, 14240
spacecraft oceanography, United States activities, 18085
study guide, to be used with USAFI course A 510, 12438
Townsend Cromwell cruises, trade wind zone pilot study, 16627-632
underwater electronic robot being developed for ocean research, USSR study, 6568
underwater research development, USSR study, 8266
United States and world ocean (lecture), 1602
USSR, Institute of Oceanology, 20th anniversary, 9622
university curricula in marine sciences, 17752
water masses in Indian Ocean, variability, 11630
Oceanography Institute, *see* Institute for Oceanography.
Oceanography, Interagency Committee on, *see* Interagency Committee on Oceanography.
Oceanography, *see* Oceanography.
Oehlnero, Robert V., summary of NODC Ad Hoc Committee and working group activities, 11631
Ock Wah Wong, *see* Hom Sheek See, and wife.
O'Connell, Joseph J., Jr.:
addresses, etc.—
June 26, 1967, 13015
Oct. 18, 1967, 18093
Oct. 23, 1967, 18092
nomination, hearing, 10823
O'Connor, Charles M., industry wage survey, industrial chemicals, 2502
O'Connor, John P., power circuits for optimum stepped-wave output in 3-phase single-way static inverters, 10008
O'Connor, Lawrence J., Jr., nomination, hearings, 6094
Oculometer, developed to control machine by eye, etc., 14376
Odar, Fuat, forces on sphere moving steadily along circular path in viscous fluid, 10258
Odessa, Tex.:
area wage survey, 15441
District Court, western district, new Midland-Odessa division, create, report, 16235
O'Donnell, Patricia M., kinetics of fluorination of beryllium, 12928
O'Donnell, William, workmen's compensation, administrative organization and cost of administration, 1353
Odontodactylus, *see* Crustaceans.

Odors:
air pollution study, 5440
measurement and control, bionic aspects, USSR study, 9652
OB 100, highlighting progress of American education, 6191
OEO, *see* Economic Opportunity Office.
OEP, *see* Emergency Planning Office.
Oertel, G. K., spectroscopic temperature measurements in plasmas, 2714
Oettinger, Katherine B., address, July 12, 1965, 1893
Off the job safety, Department of Labor safety program, OJS LS series, 16810
Office buildings, Federal, Detroit, Mich., name in memory of Patrick V. McNamara, reports, 10727, 17577
Office draftsmen, *see* Draftsmen.
Office employees:
better office skills and service, student manual, 17454
clerical, pay, national survey, 2507
office assistant, examination announcement, 16080
Office equipment, *see* Office furniture and equipment.
Office furniture and equipment:
copying equipment, GSA handbook, 12595
Federal item identification guides for supply cataloging, supplements, 3292
office copying processes and equipment, military standardization handbook, 9371
office machines, current industrial reports, 8942, 10356, 16000
regional contracts for repair and maintenance of selected office machines, savings available through expanded use, General Services Administration, GAO report, 8148
shipments by manufacturers, current industrial reports, 5868, 17431
traditional executive type, wood, Federal standard, 6313
wood, unutilized, Federal standard, 2270
Office machine operators, examination announcement, 16080
Office machines, *see* Office furniture and equipment.
Office of Special Assistant to the President for Consumer Affairs, *see* Special Assistant to the President for Consumer Affairs, Office of.
Office of Special Representative for Trade Negotiations, *see* Special Representative for Trade Negotiations, Office of.
Office of Vehicle Systems Research, *see* Vehicle Systems Research Office.
Office space, administrative, provided in major postal facilities, policies and procedures, Post Office Department, GAO review, 4880
Office supplies and devices, Federal item identification guides for supply cataloging, supplements, 3292
Office workers, *see* Office employees.
Officers, *see* Armed Forces—also names of services to which officers belong.
Officers' call, theirs to reason why, 15940
Offices:
office safety, occupational safety aid, 9703
preventing office accidents, occupational safety aid, 9713
see also Government offices.
Official gazette of Patent Office, 3650
Official publications, *see* Government publications.
Officials, *see* names of departments, etc.
Ogden, Utah, geology and hydrology, 6400
Ogives, cylinder body, control jet exhausting radially from nose, interaction effects, 5237
Oh, Mi Soon, relief, 12358, 16187, 17502
O'Hagan, Maryann J., foreign trade regulations of Central American Common Market, 17478
O'Hara, G. J., mechanical impedance and mobility concepts, 5353

JANUARY-DECEMBER

Ohio, cull trees, controlling by injecting herbicides, 8088

Ohio:

Appalachian region, hardwood lumber production, costs and returns, 4850

area measurement reports, 17423

calymenid and other Ordovician trilobites, 16698

census of agriculture, 1964, State and county statistics, 10388

census of manufactures, 1963, area statistics, 1547

census of mineral industries, 1963, area statistics, 5838

climatological data, 3096

county business patterns, 4310, 13378, 14822

electric rate book, 12512

landings, fishery products, 3553, 11073

mineral industry, minerals yearbook chapter, 6663

precipitation data, hourly, 3401

southeastern, forestry accomplishments under U.S. agricultural conservation program, 14135

southwestern, air resource management program, air pollution survey, 11717

women—

family and property law, summary, 13187

labor laws, summary, 11912

work registration under Federal States aid to dependent children of unemployed parents, Welfare Administration, GAO review, 11157

Ohio River and Valley:

daily Ohio River bulletin, 3178

McAlpine Locks and Dam, navigation conditions, hydraulic model investigation, 6210

Ohio River Division Laboratories, technical reports, 16524, 17734

Ohman, John H., effect of staining caused by sapstreak disease on sugar maple log and lumber values, 2306

Oil, see Oils—Petroleum.

Oil and Gas Office, appropriations, 1968, hearings, 7734

Oil fields, see Petroleum.

Oil Import Administration, press releases, 3748

Oil Import Appeals Board, decisions, 3654

Oil pipe lines, see Pipe lines.

Oil sand, see Sandstone.

Oil shale, development, competitive aspects, hearings, 17659

Oil wells, see Petroleum.

Oilfields, see Petroleum.

Oils:

current industrial reports, 3169, 5860, 7478

fats and oils situation, 3267

fatty acids, expanding market for oils, 10921

Federal Item Identification guides for supply cataloging, supplements, 3290

foreign agriculture circulars, 3345

light, yields and analyses from coal carbonization, 16850

movement in miniature ball bearings; factors affecting, 17089

outlook (talk), 4704

prospects for fats and oils and fatty acid industry (talk), 12460

see also Lubricants—also names of oils.

Oilseeds:

and products, European Economic Community import demand, summary, 4701

meals, production and use, postwar trends, 9391

outlook (talk), 4704

stocks, farm and off-farm, by States, 1959-65, revised estimates, 7300

U.S. fats and oils, 1909-65, statistics, 4144

Oklahoma:

area measurement report, 5814

census of agriculture, 1964, State and county statistics, 14837

census of manufactures, 1963, area statistics, 163

census of mineral industries, 1963, area statistics, 4295

Cherokees, Muskogean charm songs among, 6973

climatological data, 3096

county business patterns, 12059

electric rate book, 4778

farms, growth and capital accumulation, polyperiod analysis, 17336

highway safety study, Operation 66, joint engineering-enforcement project report, 1594

livestock and meat industry, price information and market news, 13941

mineral industry, minerals yearbook chapter, 6664

Ossage pasture report, 14692

postal map, 5395

precipitation data, hourly, 3401

soil survey laboratory data and descriptions, 14660

water systems, waste disposal systems, financial assistance to small towns and rural groups, questions and answers, 7945

women workers, 2978

Oklahoma City, Okla., area wage survey, 2503

Okun, Arthur M.:

challenges in sustaining prosperity, 5041

nomination, hearing, 7801

OLAS, see Latin American Solidarity Organization.

Old age, see Aged.

Old-age and survivors insurance, OASI series, 1605-6, 2861-65, 5505-13, 7122-28, 8688, 10085, 11795-797, 15739

see also Old-age, survivors and disability insurance—Old-age, survivors, disability and health insurance.

Old-age assistance:

Cleveland, Ohio, area, recipients, nursing home care, etc., GAO report, 8150

medical care of recipients, recovery of excess funds accumulated, GAO review, 8145

money payments to recipients, 4751

tables on percent of basic needs met, 17196

Old-age insurance, social security rulings, 3881

Old-age, survivors, and disability insurance:

additional interest earnings of trust funds from 1960 interest rate amendments, 7110

aid to the blind and OASDI recipients, comparison between beneficiaries and nonbeneficiaries, 11799

benefits, information, 10085

household workers and their employers, statistics, 2871

income status of OASDI beneficiaries with and without private pensions, 5514

increase benefits, etc., social security amendments of 1967—

hearings, 7763, 10684, 16154, 16409

reports, 14953, 14964

summary, 15053

long-range level-cost estimates, analysis of fertility assumptions, 15736

measuring early retirement, revision of benefit awards series, 17198

payable, actuarial analysis, Arkansas Titan II missile site disaster, 7115

program, 1965, covering employees also covered under State and local government retirement systems, survey, 2868

relationship of child beneficiaries to old-age beneficiaries, 1603

social security handbook, 1606

social security rulings, 2872

INDEX 1967

- Old-age, survivors—Continued
system, 1966, long-range cost estimates, 7118
widows with children under social security, national survey, 2869
see also Old-age, survivors, disability, and health insurance.
- Old-age, survivors, disability, and health insurance:
applicants for disabled worker and childhood disability cash benefits, etc., 8691
comparison of actual experience under OASDHI system with short-range cost estimates, 14644
economic effects of seasonality in tax payments, 17203
experience under OASDHI system compared to short-range cost estimates, 7117
retirement benefits comparison with prices and wages, 1966 experience, 8690
social security survey, aged population of U.S., 13120
United States population projections for OASDHI cost estimates, 8686
- Older Americans, Advisory Committee on, *see* Advisory Committee on Older Americans.
- Older persons, *see* Aged.
- Older workers, *see* Labor.
- O'Leary, Timothy J., instructions to supplement teaching oral hygiene, 14769
- Olefins, distillable, identification from coal tar, 12795
- Olfactory sense, *see* Smell.
- Oligophrenia, monograph of existing crinoids, 14528
- Olinger, Arthur J., relief, 12331
- Olives:
green, U.S. standards for grades, 2140, 16448
production, use, value, 1965-66, by States, 14696
Tariff Commission report, 8764
- Oliverhead, J. B., prediction of near field noise of supersonic jets, 14400
- Olivia, Toivo J., soil survey, Codington County, S. Dak., 7134
- Olsen, Lief O., bibliography of temperature measurement, 11584
- Olshan, Nathan H., recordkeeping systems, small store and service trade, 2856
- Olson, Katherine M., additions to fused-fluoride lubricant coatings for reduction of low-temperature friction, 5265
- Olson, Keith S., mineral industry of Wisconsin, 6671
- Olson, Pauline T., nomograms for Army manpower policy evaluation, 4227
- Olson, Richard D., naval research reviews, 3607
- Olson, Ronald J., relief, 308, 814
- Olte, Andrejs, radiation of magnetic line source excited cylinder through plasma sheath, 5176
- Olympic National Park, general information, 9963
- Omaha, Nebr., area wage survey, 6605
- Omaha Tribe of Nebraska:
disposition of judgment funds—
law, 431
report, 913
- O'Malley, Lambert S., address, Nov. 17, 1967, 17708
- Oman, P. W., collection and preservation of insects, 10182
- O'Marra, John L., nomination, hearing, 13881
- Omniranges, mechanical device accurately measures RF phase differences in VHF or UHF ranges, 6848
- Omodt, Hollis W., soil survey of Tri-County area, N. Dak., 8702
- On, Frank J., mechanical impedance analysis for lumped parameter multi-degree of freedom/multi-dimensional systems, 11489
- On-the-job training, *see* Employee training.
- Onanian, Edward D., analysis of work stoppages, 5060
- Oncology:
clinical, utilization of cybernetics, USSR study, 6553
oncological service is RSFSR, improving, 2477
Soviet research, 8257
viruses in oncology, USSR study, 14258
- One-count memory circuit prevents machine mode interaction, 6897
- One million dropouts Sputnik of 1967, 17721
- One-room schoolhouse and how it grew, 10938
- One thin dime, 12757
- O'Neill, Eugene, \$1 regular postage stamp (poster), 15648
- Ongman, H. D., nuclear superheat project, 5773
- Onions, stocks, 5554
- Ontario, Calif.:
area wage survey, 5067
World Farm Center, endorse concept, 13626
- Ontario, Lake:
small craft, gale and whole gale warning facilities chart, 14723
water pollution control program, 9501
- Ontogeny, influence of ribonuclease on reflexes of mice in ontogenesis, USSR study, 5028
- OP series, 7009
- Open every door, 13183
- Open pit mining, *see* Mines and mining.
- Open space land planning and taxation, selected bibliography, 12627
- Operation and maintenance of diesel-electric locomotives, 1772
- Operation Golden Eagle:
1967 directory of Federal recreation areas requiring entrance and user charges, 13041
outdoor recreation, questions and answers, 7030
- Operation Hygrade, anatomy of shutdown, 13972
- Operation Late Start, on-the-job training for older workers, 16791
- Operation Plumbbob (nuclear effects test): fallout, distribution, characteristics, and biotic availability, 1812
- Operation 66, JEEP, joint engineering-enforcement project, highway safety study report, 1594
- Operational unification of finite difference methods for numerical integration of ordinary differential equations, 11539
- Ophthalmoscopy, indirect light approach, USSR study, 12688
- Opinions, *see* names of courts, etc., rendering opinions.
- Opium, traffic, 17918
- Oppenheim, Edward E., cost reduction journal, 3154
- Opportunities for volunteers in public welfare departments, 13184
- Opportunities in oceanography, 8682
- Opportunity in rural America, story in pictures and words, 5674
- Opportunity knocks at executive suite, remarks, 17044
- Optical character reader, addressing for reader, 17111
- Optical illusion, aircraft accidents and visual illusions, 11958
see also Distortion.
- Optical instruments and apparatus:
raster optical instruments, USSR, 6505
wide-angle, indirect optical viewing system in high-performance jet aircraft, flight tests, 1497
- Optical monitor panel provides flexible test panel configurations, 2634
- Optical radar measurements of atmosphere, 8420
- Optical radiation, *see* Radiation.
- Optical signals, *see* Signals.

Optical superheterodyne receiver uses laser for local oscillator, 6753

Optical systems:

depth of flash optical landing system, 13032

development of optical waveguides and components, 15508

optical and microwave communications, a comparison, 11529

scanning, information limits, theoretical investigation, 5173

Optical targets, *see* Targets.

Optics:

automatic gain channel, 6761

improved grazing incidence X-ray laboratory program to develop, 6726

optical properties of coals and graphite, 16349

optical terms and definitions, military standards, 13921

systems and elements, classification bulletin, 5368

see also Electrooptics—Light.

Optimal control:

optimal and adaptive control theory, 8414

problems, Lagrange problems with variable end-point, 14356

problems, USSR study, 4959

Optimal processes:

analysis and design of space vehicle flight control systems, optimization methods, 15499

computer optimization program finds values for independent variables that minimize dependent variable, 17958

dynamic programming and—

application to optimization problems of flight mechanics, 11572

Pontryagin's maximum principle, 14387

geometric theory of optimum disorbit problems, 8427

optimal speed and optimal control problems, USSR study, 4959

selection of working communication frequencies, Soviet research, 6518

trajectory optimization for Apollo-type vehicle under entry conditions encountered during lunar return, 9919

treating optimal trajectories with restricted segments, 9805

weight optimization of straight finned radiators, design procedure, 6781

Optimal temperature regimes for thermophilic *Chlorella* investigated, USSR, 1265

Optometry:

group practice facilities, financial assistance for constructing and equipping, law, 465

summary, section-by-section analysis, legislative history, and conference report, 725

practice in District of Columbia, regulate, hearings, 16319

Oral diseases, *see* Mouth.

Oral hygiene, *see* Mouth.

Orange, Thomas W., fracture toughness of wide 2014-T6 aluminum sheet at -320° F, 12936

Orange, Tex., area wage survey, 14294

Orange County, N.Y., population, special census, 16017

Orange juice:

canned, standards for grades, amdt., 6128

from concentrate, U.S. standards for grades, 16449

pasteurized, U.S. standards for grades, 16450

Oranges, degreening response of color-sorted Florida oranges, 17300

Orbital tube flaring system produces tubing connectors with zero leakage, 8454

Orbiting solar observatory, *see* Satellites.

Orbitron ionization gages, *see* Ionization gages.

Orbits:

circular, manual control of thrust axis during planar ascent from lunar surface, 1490, 14449

computing in celestial mechanics, regularization, 12857

Cosmos satellites in near-earth orbits, USSR study, 5017

cryogenic liquid experiments in orbit, 5164

elliptic, minimum-impulse time-free transfer between, 1432

geometric theory of optimum disorbit problems, 8427

gravity-oriented satellites, adjust and station keeping method, mathematical model and study, 2688

low-thrust orbit raising in continuous sunlight while thrusting in plane perpendicular to earth-sun line, 15567

lunar, analysis for improved delta launch vehicle and AIMP-D spacecraft, 11495

Lunar Orbiter I—

extended mission operations, 14395

photographic mission summary, 8429

photography, 14394

lunar orbiting space vehicles, computer program determines thermal environment and temperature history, 16951

manned orbiting space station, thermal control considerations, 11538

Mercury-Atlas 7, spacecraft 18, 2d manned 3-pass orbital mission, description and performance analysis, 6865

orbital investigation of propellant dynamics in large rocket booster, 11517

orbital prediction and differential correction using Vinti's spheroidal theory for artificial satellites, 8482

orbital recovery problem, rapid determination of return and lateral-range for recall to recovery networks, analysis technique, 12969

orbital recovery programs, selection of recovery sites for return from low circular orbits, application of analysis technique, 12970

orbiting radiotelescope, 1500-meter, feasibility, 11414

position control for passive communications satellites, handbook, 11398

resonant librating, use in satellite geodesy, 14476

solar, unguided solid fuel rocket vehicle, feasibility, parametric design, and analysis, 12853

Vinti's accurate reference satellite orbit with inclusion of 3d zonal harmonic, differential corrections, 15564

Orchards, apple, young, establishing and managing, 5625

Orchids, plants, import requirements of Australia, 13206, 17302

Orconectes, crayfish from Alabama caves, origin of genera *Orconectes* and *Cambarus* (Decapoda: Astacidae), 17050

Orcutt, F. K., journal bearings in laminar and superlaminar flow regimes, 9803, 12849

Orders, *see* names of departments, etc., issuing orders—*also* subjects.

Ordinance of 1787, text, 10691

Ordman, Arnold:

nomination, hearings, 12421

paper, Mar. 3, 1967, 6937

Ordinance:

Coast Guard manual, amdt., 4417

machinery, industrial plant equipment handbook, 9367

pamphlet, Naval Ordnance Systems Command, 7009

timers, symposium, proceedings, 104

see also Atomic ordnance—Fire control (gunnery).

Ordnanceman, *see* Aviation ordnanceman.

Ordos Desert, geographical study, 2434

INDEX 1967

Ordovician period:
 contributions to Ordovician paleontology of Kentucky (series), 16697-698
 Martinsburg formation in Delaware Valley, Pa., N.J., middle and upper Ordovician, 6395
 Middle, brachiopods and trilobites from basin ranges, Western U.S., 11174
 rocks of east-central Alaska, stratigraphy, 6404
 silicified Middle Ordovician brachiopods from Kentucky, 16697
 trilobites from Kentucky and Ohio, 16698
 Upper Ordovician formations in Maysville area, Ky., 2361
 Ore flotation, *see* Flotation.
 Ore Knob, N. C., copper deposit, 15310
 Oregon:
 Blue Mountains, defect estimation for grand fir, Engelmann spruce, Douglas-fir, and western larch, 2289
 census of agriculture, 1964, State and county statistics, 13412
 census of manufactures, 1963, area statistics, 1648
 census of mineral industries, 1963, area statistics, 5839
 climate, 16531
 climatological data, 3096
 coast pilot supplement, 5944
 county business patterns, 174, 13379, 17427
 eastern, spruce budworm outbreak, 1944-56, differential effects, 1097
 electric rate book, 11023
 insect outbreaks, 2291, 17797
 interstate route 80N, John Day River Bridge, review of circumstances relating to collapse, GAO report, 4877
 landings, fish and shellfish, 17769
 low temperature reaction zones and alpine ultramafic rocks, 17817
 mineral industry, minerals yearbook chapter, 2561
 precipitation data, hourly, 3401
 streams, water temperature data, correlation and analysis, 8177
 water supply outlook and snow survey, 4049
 women workers, 2979
 Oregon (fishing vessel):
 exploratory collection made in southwestern North Atlantic, 1956-60, correction, 8035
 Oregon State University, Radiation Center dedication (remarks), 17407
 Ores:
 and primary products, Federal item identification guides for supply cataloging, supplements, 3291
 deposits—
 Phillipsburg district, Granite County, Mont., 15305
 Steeple Rock mining district, Grant County, N. Mex., 6390
 dressing, heavy liquid cyclone concentration, 12822
 Lawson-Dumont-Fall River district, Clear Creek County, Colo., 16683
see also Assaying—*also* names of metals or minerals
 Oresund, sailing directions, change, 17070
 Organ Pipe Cactus National Monument, general information, 14552
 Organic chemistry:
 Academy of Sciences, USSR, report, 6579
 progress report of Organic Chemistry Section, 18081
 USSR recent studies, 2444
 Organic Chemistry Section, annual report, 18081
 Organic compounds:
 adsorption at electrodes, 10003
 charcoal, NMR method for determining organic loading, 14597
 classification definitions, 18133

Organic compounds—Continued
 organic phosphorus pesticides, commercial names, shipping containers, etc., technical reference, 9734
 organic substances in water (series), 15312
 spreading of organic liquids on soda-lime glass, effect of absorbed water, 18110
 synthesis of cyclic sulfides, 12823
 synthesis of research materials, 18081
 synthetic chemicals, production and sales, 13159
 dyes, 13160
 elastomers, 13161
 flavor and perfume materials, 14703
 medicinal chemicals, 18238
 pesticides and related products, 8766
 pigments, 14704
 plasticizers, 17256
 rubber-processing chemicals, 15807
 synthetic organic chemicals, production, preliminary report, 3700
 Organic matter:
 chemical nature of organic matter in water of major rivers in USSR, 9614
 trace organic materials in water, methods for determination, 6451
 Organick, Avrum B., indirect hemagglutination test for *Mycoplasma pneumoniae* employing commercially available antigen and adapted to microtiter technic, 5754
 Organisms:
 factors contributing to increased resistance of the organism, 11277
 formation of interferon in organism of experimental animals, characteristics, USSR study, 4989
 human, space psychophysiology, effect of high and low afferentation, USSR studies, 1345
 organism reactivity to disease development, USSR book excerpts, 16741
 Organization:
 safety organization in industry, instructor outline, 8289
 scientific organization of work and training of industrial workers, USSR studies, 16752
 Organization charts:
 Air Force, 3012
 Army Department, 3393
 Federal executive departments and agencies, 10847
 Organization for Economic Cooperation and Development, Atlantic industrial community looks to the future (remarks), 10451
 Organization in industry, industrial application of automatic control systems and computers, 6509
 Organization manual (Coast Guard), 4418
 Organization of American States:
 charter, protocol of amendment, text, 10703
 headquarters site in D.C.—
 hearings, 6033
 report, 7701
 political prisoners and their relatives in Cuba, report of Inter-American Commission on Human Rights, hearings, 957
 Organization of Congress Joint Committee, continue and provide additional funds, report, 13791
 Organization of Congress, Special Committee on Senate, *see* Congress, Special Committee on Organization of Senate.
 Organizations:
 Bulgarian scientific, decrees on operating under their own accounting systems, 6586
 contributions to, which are deductible for income tax purposes, list, 12648
 supplements, 3166
 scientific, operating under their own accounting systems, Bulgarian decree, 5030

Organizations—Continued

- scientific research, cost accounting, USSR study, 1343
sources, Indian and Eskimo arts and crafts, list, 12639
USSR, scientific organizations, development, 1227
withdrawal of cash from Treasury for advances under Federal programs, 7207
see also Nonprofit organizations.
- Organized crime, *see* Crime and criminals.
- Organizing a Federal credit union, 14018
- Organizing food training program, 17722
- Organophosphorus compounds:
anticholinesterase activity of organophosphorus inhibitors, USSR study, 1168
anticholinesterase properties of O-H-alkyl-S-butyl methyl thiofosphanates, USSR study, 8276
antidotes against intoxications, Rumanian study, 11271
intoxication, clinical and therapeutic aspects, Polish study, 4935
mechanisms of physiological action, USSR studies, 6512
poisoning by pesticides, detection using automated method, 13351
- Organotin compounds used in control of plankton growth, USSR, 2460
- Organs:
cell tissue and organ culture, 2d decennial review conference, 18172
transplantation, experimental, USSR studies, 9643
- Orientações, E. U. A., 15813
- Orientation:
human dynamic space, and vestibular system, 1428
Lamb-wave technique, use for improved ultrasonic TV images, 15494
solar, of spacecraft, effect of planetary albedo, 16985
- Orifices, size, and heat-transfer rate, effect on measured static pressures in low-density arc-heated wind tunnel, 6876
- Origin and dynamics of ocean waves, 12674
- Orlando, Fla., aerial radiological measuring survey of area, 1780
- Ornamental plants, *see* Plants.
- Ornamentation, *see* Decoration and ornament.
- Orning, George W., private pleasure boating in national forests of Minnesota, 8068
- Orsino, R. J.:
computer program for NRL satellite position display, 8595
simplified prediction equations for NRL satellite position display, 5349
SPAD formatter, buffer interface between satellite prediction computer and display, 8598
- Orth, Donald J., dictionary of Alaska place names, 14174
- Orthicons, electronic shutter gates image, orthicon on and off, 15540
- Orthogonal functions, *see* Mathematics.
- Orthonomization procedure for multivariable function approximation, 6749
- Orthopedic stretcher with average-sized person can pass through 18-inch opening, 5222
- Orthostasis:
forearm vascular responses, 4175
tilt table orthostatic tolerance test, biomedical monitoring during dynamic stress testing, 7362
- Orthotics, examination announcement, 17455
- Ortmeyer, Carl E., marriage statistics analysis, United States, 5471
- Orton, Robert B., Mineral Wells, Tex., climatic summary, 12478
- Ortuglio, Carmen, correlation of BM-AGA carbonization yields from 13- and 18-inch-diameter retorts, 2575
- Osborn, Ben O., soil conservation, devoted to wise use of land and water resources, 3883
- Osborn, Howard A., Brazil's position in world agricultural trade, 17713
- Osborn, M. J., fluid amplifiers, bibliography, 11400
- Osburn, M. R. controlling insects and diseases of pecan, 1679
- Oscillations:
acoustic, in simulated rocket combustion chambers, mechanical absorption, 5254
cone, problem solved in supersonic flow by small perturbation techniques, 6849
elastic, measurement of propagation velocity in surface layers of Indian Ocean water, on 36th cruise of USSR experimental ship Vityaz, 15353
forced discontinuous, fluid in pipeline, 6912
Gemini configurations, stability in pitch and yaw, errata, 1474
liquid, flexible and rigid ring baffles for damping in large scale cylindrical tanks, effectiveness, 8493
pump, reduced by negative feedback system, 8473A
system precisely controls oscillation of vibrating mass, 16938
- Oscillations (electric):
plasma, stimulated by pre-bunched electron beam, 12870
- Oscillators:
fluidic, used as humidity sensor, 8473
temperature-compensated subcarrier, design, 15534
see also Lasers.
- Oscillograph, channel selection, acceleration by use of color-coded sleeve shutters, 17991
- Oscillography, *see* Tachoscillography.
- Oscilloscopes, used as X-Y plotter or 2-dimensional analyzer, 15539
- Osmium, sliding friction, 15578
- Osmosis:
reverse:
brackish well water tests at Midland, Fort Stockton, and Kermit, Tex., 11217
desalination pilot plant, operation, 2395
membranes containing graphitic oxide, 6444
membranes for desalination, study, 6448
membranes, new polymer systems, research and development, 8213
one mgd brackish water plant, spiral module concept, parametric study, 9590
permeability requirements of membranes for use in desalination, 15331
Potomac River, 6441
systems, simultaneous development of velocity and concentration profiles, 11218
test, acid mine water at Kittanning, Pa., 4915
ultrathin membranes, fabrication and evaluation, 12641
vapor gap, osmotic distillation process, 2394
- Osteoarthritis, in adults, by selected demographic characteristics, etc., 5468
- Ostracoda, *see* Crustaceans.
- Ostrom, Arnold E., defense transportation, Military Traffic Management and Terminal Service, 16731
- OSTS, *see* State Technical Services Office, Commerce Dept.
- O'Sullivan, Thomas C., relevance of factor analysis to study of arms control and limited war, 15924
- Oswald, Daniel D.:
commercial forest area and timber volume in California, 4859
forest statistics for Del Norte County, Calif., 4860

INDEX 1967

Oswalt, Noel R., Hilo Harbor tsunami barrier, 2220
 Oswalt, Wendell H.:
 ethnoarcheology of Crow Village, Alaska—
 departmental edition, 8872
 document edition, 9048
 Ota, Hajime, houses and equipment for laying
 hens, for loose housing, 10183
 Otapiria, *see* Pelecypods.
 Otelza, Alberto, relief, 554
 Otepka, Otto, case, hearings, 2131
 Other war in Vietnam, progress report, 1151,
 1627
 Otis, Leon S., animal research in psychopharmacology, index for psychopharmacology handbooks, 7083
 Otoliths, orbital otolith experiment, temperature control, 12868
 OTR series, 2742
 Ottawa, Ohio:
 Maumee River basin, engineer report—
 departmental edition, 2212
 document edition, 2001
 Ottawa, Indiana:
 judgment funds, disposition—
 law, 14907
 reports, 12268, 13829
 Otter Creek, coral bed and its fauna, east-central Kentucky, 6394
 Otto, Francis L.:
 construction safety, site clearing, 17887
 safety inspection procedures, 8290
 safety training programs, instructor outline, demolition, 1357
 Ouachita River, Columbia Lock and Dam, navigation conditions, hydraulic model investigation, 6212
 Oudenhoven, Martin S., rock bolt anchors, 5126
 Outline, John A., all hands, Naval Personnel Bureau career publication, 3025
 Our American Government, what is it? how does it function? 5977
 Our American land, use the land, save the soil, 15839
 Our American way of life, 11211
 Our changing partnership with Europe, report of special study mission, 7744
 Our common task, address, 2188
 Our flag, 519
 print as House document, reports, 13652, 13819
 Our Government, 12630
 Our Lady of Pillar Catholic Church, Santa Ana, Calif., relief, 13574
 Our market is the world, our product the individual, 12473
 Our struggle against pests, 1716, 7290
 Our United States, 12629
 Ourin, Miriam A., post layoff labor market experiences of former Republic Aviation Corporation (Long Island) workers, 5719
 Outdoor recreation, *see* Recreation.
 Outdoor recreation action (periodical), 3664
 Outdoor Recreation Bureau:
 appropriations, 1968, hearings, 7734
 grants-in-aid manual, 7026-28, 13037-40
 press releases, 3749
 programs, briefing session, hearings, 10655
 Outdoors USA, 17325, 17566
 Outer Banks:
 between Ocracoke Inlet and Beaufort Inlet, hurricane survey, engineer report—
 departmental edition, 2215
 document edition, 2004
 dune stabilization with vegetation, 16523
 Outer Continental Shelf lands act, *see* Continental Shelf.
 Outer space:
 activities of Federal departments, etc., investigation, authorization, report, 4605
 aerospace companies, backlog of orders, current industrial reports, 3170, 13386
 aerospace measurement techniques, symposium, 6734

Outer space—Continued
 aerospace safety (periodical), 2993
 aerospace technology positions with NASA, 7536
 applications, for benefit of mankind, survey, 9824
 applications, 1965, significant achievements, 6735
 astronomy in space, 8434
 code of Federal regulations, 7977, 9462-63
 coding system for deep space probes, 14493
 cryogenic liquid experiments in orbit, settling and interface dynamics, 2608
 defense space research facility, agreement with Australia, 7189
 education, exploration, research and technology, publications, price list, 5419
 electron tubes for space applications, requirements, 5231
 ESSA weather watch in space, 1033
 exploration—
 and use, treaty on principles governing activities of states, analysis and background data, 7791
 from Eumymede to Ganymede (address), 18059
 PACAF bibliographies, 10227
 peaceful, U.S. launch vehicles, NASA facts, 9822
 possibilities and prospects of use of hypothermia, USSR study, 16768
 extravehicular protection and operations, study, 12859
 5-cent twin space commemorative postage stamps (poster), 17114
 future national space objectives, 2058
 geophysics and space data bulletin, 3377
 information from Cosmos satellites in near-earth orbits, USSR study, 5017
 internally and externally finned radiators for Brayton cycles in space, exploratory study, 8405
 international cooperation (remarks), 2734
 life support system for flights of extended time periods, 1425
 locomotion device, extravehicular, jet shoes, 8483
 lunar science and exploration, 1967 summer study, 17952
 manned extravehicular activities in assembly and operation of large space structures, 16901
 medical benefits from space research, 17948
 NASA, 20th century explorer into sea of space, guide to careers in aerospace technology, 11574
 national space program, its values and benefits, 9169
 near-space environment, 11575
 nuclear systems program, AEC authorizing legislation, 1968, hearings, 10491
 observation of distant man-made space objects, USSR study, 16765
 opaque sphere in space, theoretical solution on nonlinear problem of transient cooling, 14458
 physiological measurements during space travel, USSR study, 8243
 physiology of work in space, USSR study, 8247
 power systems advanced technology conference, 1440
 protons and space travel, introduction, 1731
 psychophysiology, effect of high and low afferentation on human organism, USSR studies, 1345
 radiation equivalence for permanent damage to transistors, 14380
 research and development, by-products (address), 5280
 research, investigation—
 authorization, report, 7671
 expenses, report, 10554

Outer space—Continued
 research review, Office of Aerospace Research (periodical), 3827
 role of vestibular organs in exploration of space, 5191
 satellites and space probe projects, 1966 summary, Goddard Space Flight Center, 12846
 science and technology of aerospace, NASA Scientific and Technical Information Facility, 8432
 scientific and technical aerospace reports, 3550
 Government-wide index, 3381
 indexes, 3851
 shapes of tomorrow, space oriented geometry for secondary levels, supplement, 8513
 solid-state wide-range low power camera timer for space applications, 5240
 Soviet bloc research (periodical), 3886
 space, new frontier, 9821
 space program—
 in post-Apollo period, report, 7050
 international significance (address), 2733
 space progress (address), 5281
 speaking of space and aeronautics (series), 2733-34, 5280-81, 9932, 17022, 18059
 star/horizon simulator used to test space guidance system, 11447
 treaty—
 hearings, 9313
 message from the President, 6061
 report, 9187
 United States activities, annual report, 5994
 USSR activities, brief recapitulation, 1305
 USSR programs, 1962-65, goals and purposes, achievements, plans, and international implications, 4628
 see also headings beginning Space.
 Outgassing, rates for solid rocket fuels in vacuum, 5262
 Outlaw, R. A., small volume, ultrahigh vacuum system for ionization gage studies, 18037
 Outlet works, see Reservoirs.
 Outlying possessions :
 durable status of imports from insular possessions, amend tariff schedules—
 law, 509
 report, 911
 U.S. trade, monthly report, 3359
 Outpatient services, see Clinics—Hospitals.
 Output, see Production.
 Ovarian cancer, see Cancer.
 Overflow system for standard U.S. Weather Bureau evaporation pan, 2318
 Overhead electric lines, see Electric lines.
 Oversea service :
 Defense Dept. personnel, air transportation of dependent children, GAO review, 9545
 opportunities for secretaries in Foreign Service, 8722
 Overseas activities in support of modern foreign language and area studies, 16506
 Overseas business reports, 229-233, 1941-47, 3666, 4431-46, 5951-56, 7573-80, 9013-20, 10458-463, 12132-138, 13455-466, 14880-882, 16100-108, 17474-482
 Overstreet, John M., ESSA world, 3243
 Overstreet, William C., geologic occurrence of monazite, 17826
 Overtaking and passing on 2-lane rural highways, 14641
 Overtime, see Hours of labor.
 Owen, R. W., jr., atlas of July oceanographic conditions in northeast Pacific Ocean, 8041
 Owen, Robert A., relief, 609, 7644, 12355, 13484

Owens, James M. :
 addresses—
 Oct. 28, 1966, 142
 Jan. 23, 1967, 5806
 Oxidation :
 anodic, of $PbSO_4$, etc., plate materials of lead-acid cell, 11672
 graphite, catalytic effect of impurities, 18040
 JT graphite composites, static, subsonic, and supersonic test, 18053
 Oxide cathodes, see Cathodes.
 Oxides :
 bonding of oxides of high temperature alloys, 10016
 fibering, in refractory-metal matrices, 9900
 film on metal substrate reduced to form metal-oxide-metal layer structure, 12841
 oxide dispersion strengthened alloys, 17951
 oxide-glass compositions, hot rolling, 12820
 see also oxides by name, e.g., Graphite oxides.
 Oxidizer valves, see Valves.
 Oxidizing agents :
 oxidizer-rich oxygen-hydrogen combustion characteristics, preliminary investigation, 2708
 solid oxidizer added to liquid fuel increases specific impulse, 9831
 Oximes, monoquaternary dioximic compounds, as antidotes against intoxications with organophosphoric compounds, Rumanian study, 11271
 Oxygen :
 absorption coefficients of O_2 at oxygen windows, 18050
 and potent pint, equipment required at high altitudes, 8921
 atoms, reaction rates with carbon monoxide, 16997
 blood, saturation determined by transmission spectrophotometry of hemolyzed samples, 16936
 breathing oxygen effects upon night vision thresholds, 11347
 combustibility of materials in oxygen-helium and oxygen-nitrogen atmospheres, 5706
 concentrated, chlorate candle provides source, 14410
 consumption in living tissues, effect of chemically inert gases, 5708
 coupled vibrational-dissociational flows over wedge, effects of measured dissociation-rate constants, interpretations, 12943
 deficit incurred during hypoxia and relation to excess lactate, 7355
 dilute, viscosity and thermal conductivity coefficients, 5293
 effect on dog plasma sulfhydryl groups in vitro, 5712
 effect on flammability of materials in hyperbaric atmospheres, 11675
 effects of 100% oxygen at reduced pressures on behavioral changes in rats at ground level following gestation and growth, 15899
 enriched blast injection, blast furnace operation, 12828
 environment at 210 mm. Hg absolute, effects on rats, 1740
 equipment, civil aviation, physiological protective efficiency, techniques for evaluating, development, 15979
 fire protection problems, 17816
 gaseous-hydrogen-liquid-oxygen rocket combustion at supercritical chamber pressures, 17001
 head lettuce held in low-oxygen atmospheres, market quality and rate of respiration, 10180
 in general aviation, 4250

INDEX 1967

Oxygen—Continued

- intermittent 98 percent oxygen and 380 mm. Hg total pressure, influence on susceptibility to tularemia, 5715
- liquid, and gaseous-hydrogen combustors, chugging instability, 11547
- liquid oxygen ducting cleaned by falling film method, 16947
- low-pressure pure environment, rats born and raised in, energy metabolism, 5709
- man in oxygen-helium atmosphere—
 - behavior factors, 86
 - blood enzyme response, 85
 - clinical observations, 90
 - enteric microbial flora, 79
 - excretion of steroids and catecholamines, 7366
 - exercise and cardiovascular response, 83
 - heat exchange, 81
 - introduction and general experimental design, 91
 - major and minor atmospheric components, 89
 - nutritional evaluation, etc., of feeding bite-size foods, 82, 83
 - oral, cutaneous and aerosol bacteriologic evaluation, 84
 - renal response, 87
 - respiratory function, 80, 92
- new electrolyte may increase life of polarographic oxygen sensors, 6740
- nitrogen-oxygen mixture, vibrationally relaxing, centered one-dimensional unsteady expansion, 6858
- oxidizer-rich oxygen-hydrogen combustion characteristics, preliminary investigation, 2708
- phase relations in uranium monocarbide region of system uranium-carbon-oxygen, 12821
- photodesorption from nickel oxide powder, 16995
- physiological, psychological, and bacteriological aspects of 20 days on 100% oxygen, etc., 6723
- recombination of carbon monoxide and atomic oxygen at high temperatures, 2718
- regeneration from carbon dioxide—
 - by electrolysis in solid oxide electrolyte cell, 6715
 - on spacecraft, electrolysis cell, 2607
- spacecraft atmosphere, Apollo accident, hearings, 6088-89, 9299, 10796, 12396
- steelmaking, effect of lime structure, 6682
- tissue oxygenation during hemorrhage in dogs breathing 1 and 3 atmospheres of oxygen, 15895
- titanium alloy system and titanium chlorides in molten sodium chloride, reaction rates, 14359
- treatment of altitude disbarism with oxygen under high pressure, 7367
- uptake in mice, effect on inert gases and low pressure normoxic environments, 76
- Oxygen masks:**
 - constant-flow phase dilution designs for general aviation, performance characteristics, 17412
 - passenger disposable, physiological protective efficiency of new prototype mask, 4248
 - Sierra, hanging, quick-don crew, pressure breathing, evaluation, 4249
- Oxyhemoglobin, dissociation, effect of nitrogen dioxide-nitrogen tetroxide, 13270
- Oyarzun, Ramon E., relief, 12340, 16211
- Oysters, certified shipper, list, 3089
- Ozark Mountains:**
 - Appalachian loblolly grows well, 2320
 - cordwood yields from thinnings in young oak stands, 2307
 - rural industrialization, case study, 17711

Ozark Mountains—Continued

- shortleaf pine seedling inventory methods on broadcast-seeded areas, 8072
- southwest Missouri, establishing grass range, 14092
- Ozolins, Guntis, rapid survey technique for estimating community air pollution emissions, 7062
- Ozone:**
 - accidental poisoning in workers, prevention, 2820
 - use in tomato ripening rooms, 5

P

- P&SA, *see* Packers and Stockyards Administration.
- P.C.M.R., *see* President's Committee on Mental Retardation.
- P.H.S., *see* Public Health Service.
- P.P.C. series, 3667
- P.R.L., *see* Personnel Research Laboratory.
- PA series, 43-49, 1710-18, 4128-37, 5666-77, 7281-93, 8838-45, 10188-194, 11937-938, 13235-237, 14754-758, 15866-871, 17326-330
- PACAF basic bibliographies, 4169, 7338, 8866-67, 10227-230, 11950, 13266
- Pace, George M., evaluation of Dynaflect for non-destructive testing of portland cement concrete pavements, 16524
- PACE (Projects to advance creativity in education), *see* Elementary education—Secondary education.
- Pacesetters in innovation, 10941, 17723
- Pacific area:**
 - airman's guide and chart supplement (periodical), 3668, 12500
 - Asia, Pacific and United States, hearing, 6099
 - central, Marine Corps operations in World War II, history, 12783
 - climatological data, 3096
 - East Asia and Pacific series, 7143, 8713-16, 11822-824, 13137-138, 14672-673, 17218-220, 18228-229
 - echo of progress (remarks), 10452
 - Federal Aviation Administration, procurements, and costs of dedication ceremonies, GAO review, 11155
 - great potential for tourism (remarks), 9022
 - PACAF basic bibliographies, 4169, 7338, 8866-67, 10227-230, 11950, 13266
 - South, mineral industry, regional review, minerals yearbook chapter, 6673
 - southwest, Japanese operations in World War II, reports of Gen. MacArthur, 11992
 - travel industry, planning for future expansion (remarks), 8975
- Pacific basic bibliographies, 4169, 7338, 8866-67, 10227-230, 11950, 13266
- Pacific basin market for wood products for military support activities, 1098
- Pacific Coast:**
 - coast pilots—
 - Alaska, Cape Spencer to Beaufort Sea, supplement, 5945
 - Alaska, Dixon Entrance to Cape Spencer, supplement, 7554
 - California, Oregon, Washington, and Hawaii, supplement, 5944
 - fisheries, annual summary, 9510
 - light list, 16089
 - nautical chart catalog, 7558
 - North America and Asia, tidal current tables, 16087
 - storm warning facilities chart, Canadian border to Eureka, Calif. and Alaska, 14717
 - surface water temperature and density, 17466
 - transportation lines, 13984
 - see also* Pacific States.

Pacific Islands:

light list, 16089
lights and fog signals, list, change, 1537, 7004, 11642, 18099
plants, studies, new and noteworthy flowering plants from Fiji, 12997
sailing directions, change, 11638
surface water temperature and density, 17466
western, chitons and gastropods, Halio-
tidae through Adeorbidae, 4890
Pacific Islands Trust Territory, *see* Trust
Territory of Pacific Islands.
Pacific Northwest, *see* Northwest (U.S.).
Pacific Northwest Forest and Range Experi-
ment Station:
annual report, 11102
publications, list, 3510, 11101

Pacific Ocean:

central and northeastern, bathyal poly-
noids, 6960
central and western, tide tables, 14875
danger areas, DAPAC, 11641
eastern tropical, biological oceanography,
5088
North, zoarcid fish, new genus and species,
11606
northeast—
atlas of July oceanographic conditions,
8041
pelagic amphipod *Cyphocaris challen-*
geri (Gammaridea: Lysianassidae),
variation and distribution, 6967
northeastern part off U.S. coast, agree-
ment with USSR, 11858
notice to mariners, 3641
portunid crabs, Smithsonian collections,
5540
radio navigational aids, change, 7006,
11647, 17075
radio weather aids, change, 2772, 8578,
11648, 17076
Soviet oceanographic ship conducts marine
research, 14240
tunicata specimens of National Museum,
9950
western, lights and fog signals, list, 5332,
9975, 14579

Pacific slope basins, *see* Pacific States.

Pacific Southwest Forest and Range Experi-
ment Station, publications, list, 16650

Pacific States:

home fruit garden, 5635
Pacific slope basins—
California floods, magnitude and fre-
quency—
coastal basins south of Klamath River
basin and Central Valley drainage
from west, 11188
Klamath and Smith River basins and
Central Valley drainage from east,
14177
surface water quality, 11192
water pollution and other related fields,
inventory of research, 15254

Packaged disaster hospitals, *see* Hospitals.
Packaged Government research and develop-
ment information for industry, 10438

Packaging:

administration, Army field manual, 15938
converted flexible products, current indus-
trial reports, 15992
dangerous materials, military aircraft
transportation, Air Force manual,
change, 13255
fair packaging and labeling act of 1966—
law, 12157
remarks, 4426, 5958, 5960, 12130
Federal item identification guides for sup-
ply cataloging, supplements, 3287
film-wrapped and naked-packed lettuce,
market quality, 10152
industry report, 3147
materials, Federal test method standard
16605

Packaging—Continued

meat and poultry in retail food stores, sys-
tems and equipment, 7276
prepackaging pears at shipping point, 1703
procedures for parts and equipment, mil-
itary standard, 16468
requirements code, military standard,
3559, 6151
rhubarb, storage and shelf life, 5645
steel products, recommendations of trade,
amdt., 6920

see also Packing.

Packed with ideas for outdoor fun, 11711

Packers:

packers and stockyards—
act of 1921, amend, hearings, 13691
resumé, 3672, 13042

see also Packing industry.

Packers and Stockyards Administration,
P&SA series, 17103

Packing:

converted flexible packaging products, cur-
rent industrial reports, 3169
supplies and equipment, AMC pamphlet,
4192
supplies, Federal item identification guides
for supply cataloging, 3287
see also names of articles packed.

Packing industry:

feeding of livestock by certain packers,
prohibit, hearings, 2037
packers and stockyards act—
as it applies to auction markets, 15870
assists to recover losses in livestock
claims, 1712, 15869
recordkeeping for livestock dealers, 44
what it is, how it operates, 15866
packers and stockyards resumé, 3672,
13042

Packing materials, Federal test method
standard, 16605

Packinghouses:

bulk handling spring crop potatoes from
harvester to packing line, methods and
costs, 35
economic aspects of unhairing hides, 11934
peach, layout guidelines, 7247

Padding:

automotive seat backs, Federal standard,
6329
evaluation of various materials for crash
protection, 5803

Padgett, G. V., oceanographic and hydro-
graphic systems for training, 11670

Padovano, Frank A., Greek canned deciduous
fruit industry, 17792

Padron, Menello S. D., relief, 12337, 16197

Paeng, Hye Suk, relief, 9225, 18506, 13603

Paeng, Mi Kung, relief, 9225, 13506, 13603

Pagaran, Sixto M., relief, 9241

Page, Chester H., mathematics and mathe-
matical physics, Journal of research, 3459
3459

Page, Louise, food and your weight, 14744
Page, R. W., data for wells in Madera area,
San Joaquin Valley, Calif., 12605

Page, William A., thermal radiation studies
of ablating bodies in ballistic range, 5234

PAH, *see* Para-aminohippuric acid.

Pahrump Valley, hydrology of valley-fill and
carbonate-rock reservoirs, 14178

PAIGH, *see* Pan American Institute of Geog-
raphy and History.

Pails, steel shipping, current industrial re-
ports, 3169

Pain:

accurate depth measurements provided by
modified algometer, 6809
red is color of hurting, planning for chil-
dren in hospital, 11758

Paine, Lee A.:

accidents caused by hazardous trees on
California forest recreation sites, 11125
butt rot defect and potential hazard in
lodgepole pine on selected California
recreational areas, 1093

INDEX 1967

- Paint:**
 burning characteristics, fire-retardant undercoat influence on combustible topcoat, 13036
 current industrial reports, 3169, 10357
 Defense Dept. stocks, transfer to GSA. GAO review, 9546
 Federal item identification guides for supply cataloging, supplements, 3290
 manual, new construction and maintenance, 15979
see also Pigments—Primers (paint).
 Paint shops, safety engineering in painting and varnishing shops, USSR book excerpts, 15363
 Paintability of 2 Hawaii-grown woods, 4843
Painting:
 administrative wheeled vehicles, military standard, 4678
 Federal facilities in Washington area, irregularities in performance, hearing, 15033
 outside wood surfaces, wood finishing, 1058
Paintings:
 Alice Pike Barney memorial lending collection, 2747
 Bingham, George C., exhibition catalog, 18084
 Isleta paintings, artist in pueblo society, letters, etc., 14547
 transfer in trust for Weimar Museum, agreement with Germany, 7190
 vested German, transfer to Germany, hearing, 741
Paints, see Paint.
 Pair, Claude H., sprinkler irrigation, 5638
 Pajaro River:
 drainage basin, flood control, engineer report—
 departmental edition, 10958
 document edition, 10498
Pakistan:
 accessions list, Library of Congress American Libraries Book Procurement Centers, Karachi and Dacca, 3673
 agricultural commodities, agreements, 1640, 7166, 8744, 15772, 15793
 cotton textiles trade, agreements, 11834, 15797
 education, financing of exchange programs, agreement, 17288
 mineral industry, minerals yearbook chapter, 8361
 U.S. travelers, you can assist U.S. balance of payments, 11887
 West, Punjab region, aquifer tests, analysis, 11187
 Palanquin Project, *see* Project Palanquin (plowshare program).
Paleontology:
 contributions to Ordovician paleontology of Kentucky (series), 16697-698
 contributions to paleontology (series), 8175, 11174, 12614-615, 17827
 lower Paleozoic paleontology and stratigraphy of east-central Alaska (series), 6404
 neutron activation analysis traces copper artifacts to geographical point of origin, 5388
 New Zealand artifacts, from U.S. transit of Venus expedition, 6972
see also Fossils.
 Paleotectonic investigations of Permian system in United States, 16691
Paleozoic era:
 lower Paleozoic paleontology and stratigraphy of east-central Alaska (series), 6404
 stratigraphy of Independence quadrangle, Inyo County, Calif., 2364
 Pales weevil, *see* Weevils.
Palladium:
 electrodeposition of thick coatings on refractory metals from aqueous electrolytes, 16861
Palladium—Continued
 low temperature specific heat of palladium containing interstitial hydrogen, 1548
 silver-palladium braze alloy recovered from masking materials, 6793
 solid palladium-silver alloys, thermodynamic properties, investigation by torsion-effusion technique, 17924
 Pallets (materials handling):
 Appalachian hardwoods for pallets, laboratory evaluation, 16661
 Palm Springs, Calif.:
 aircraft accident, 17060
 dedication of certain streets, etc., on Agua Caliente Indian Reservation and to convey title to—
 law, 14908
 reports, 9135, 13828
 Palm Springs Reservation:
 dedication of certain streets, etc., and convey title to Palm Springs, Calif.—
 law, 14908
 reports, 9135, 13828
 Palmer, Raymond W., variable-length constant-velocity traveling magnetic wave plasma accelerator, 18034
 Palmore, Erdman, widows with children under social security, 2869
Palsy:
 cerebral—
 causes, etc., research, 18183
 developmental approach to casefinding, 10493
 Pamphlets, catalog of copyright entries, 12432, 16451
see also names of departments, etc., issuing pamphlets.
 Pan American Institute of Geography and History:
 participation of United States, appropriation authorization—
 law, 374
 report, 676
 Pan American World Airways, Inc., emergency board report, 4724
Panama:
 agriculture and trade, 7887
 air transport services, agreement, 15782
 alien amateur radio operators, authorization to operate, agreement, 7188
 El Real, Darien Province, environmental survey, 8895
 mineral industry, minerals yearbook chapter, 14331
Panama Canal:
 act of 1964, amend, sea-level canal site connecting Atlantic and Pacific Oceans, construction, hearings, 10664
 appropriations, 1967, law, 403
 appropriations, 1968—
 hearings, 10634, 16393
 report, 13678
 cash relief act, Increase benefits—
 law, 426
 report, 934
 code of Federal regulations, 14034
 Isthmian Canal, policy questions, Canal Zone, Panama Canal sovereignty, modernization, new canal, compilations of addresses, 520
 Panama Canal review (periodical), 3674
Panama Canal Company:
 annual reports, 148, 13356
 canal tolls and route studies, status report, hearings, 10664
Panama Canal Zone, see Canal Zone.
Panama City, Atoms in Action, Nuclear Science Demonstration Center, opening ceremonies (remarks), 8916
Pandaridae, see Copepods.
 Panel boards, optical monitor panel provides flexible test panel configurations, 2634
 Panel on High Speed Ground Transportation, report, 13469
 Panel on Invention and Innovation, report, 5962

Panel on Science and Technology :

- 8th meeting—
papers, 12315
proceedings, 9170
- Panelfab International, President's E award
for excellence in exporting (remarks),
1949
- Panels (aircraft) :
comparison of panel flutter results from
approximate aerodynamic theory with
results from exact inviscid theory and
experiment, 1480
- Panels and paneling :
compression tests of open-face truss-core
sandwich panels, 5255
equipment designs, Mylar film eliminates
silk screening, 1454
flat rectangular panels, flutter analysis
based on 3-dimensional supersonic un-
steady potential flow, 6910
illuminated by edge-lighted lens tech-
nique, 5204
- Instrument panels—
instruments and control devices for
automotive vehicles, Federal stand-
ard, 6317
light-aircraft, injury potentials, 1820
vertical-scale, fixed-index, evaluation for
X-15 airplane, 9918
measuring surface irregularities in panel
products, 11113
metal panels, open mesh, prevention of
accumulation of snow and ice, 8879
oscillating panels in low supersonic flow
with turbulent boundary layer, pressure
distributions, 6718
potting compound for honeycomb sand-
wich fasteners, depth control, study,
6834
steel test panel helps control additives in
pyrophosphate copper plating, 17969
thermal conductivity of wood-base fiber
and particle panel materials, 14124
thermostructural, refurbishable for—
manned lifting entry vehicles, research,
2605
panel attachment mechanism suitable
for application, 5160
vibration analysis of cylindrically curved
panels with simply supported or clamped
edges, 5263
wood-brick tile, 14133
- Pankratz, Louis B. :
thermodynamic data for molybdenum car-
bide and tantalum carbide, 1410
thermodynamic properties of 3 lithium-
aluminum silicates, 14355
- Pannell, James P., soil survey of Prowers
County, Colo., 7137
- Pants, *see* Trousers.
- Paone, James, drillability studies, statistical
regression analysis of diamond drilling,
2584
- Papasavvas, Marina B., *see* Restos, Marina P.
- Paper :
chromatography, electronic circuitry used
to automate, 12913
current industrial reports, 3169, 8944
determining scattering and absorption co-
efficients by diffuse illumination, 11114
finishing and conversion equipment and
supplies, U.S. Trade Center, Stockholm,
Sweden, 4921
Government specification standards, 2066,
3380, 9178, 15054
- Industry—
Government services available for pro-
motion of products abroad (remarks),
6465
Industrial plant equipment handbook,
4675
industry report, 3788
laminates, paper base, list of publications,
8054

Paper—Continued

- light sensitive, use for calibrating carbon
arcs used in testing textiles for color-
fastness to light, recommended method,
12081
sheet sizes and hole-punching data for
filler paper and forms bound in ring,
post and prong binders, military stand-
ard, 9374
trade and tariff information, summaries,
8765
- Paper birch, *see* Birch.
- Paperboard :
current industrial reports, 3169, 8944
industry report, 3788
see also Pulpboard.
- Papers, *see* Records.
- Paperwork (office practice) :
small store and service trade, recordkeep-
ing systems, bibliography, 2856
- Pappan, Josephine G., or heirs, relief, 610
- Pappan, Julie G., or heirs, relief, 610
- Pappan, Victore G., or heirs, relief, 610
- Papua, mineral industry, minerals yearbook
chapter, 9759
- Para-aminohippuric acid :
PAH stability in frozen plasura utilizing
improved automated imulin method, 4185
sodium acetate effect on TmPAH depressed
by exposure to hydrazine, 4177
- Paraboloids :
shells of revolution, differential equations
of axisymmetric vibration, 17946
spinning paraboloidal tension networks,
16903
- Parachute riggers :
1 & C, aircrew survival equipmentman,
supplement, 11652
3 & 2, aircrew survival equipmentman,
supplement, 11652
- Parachutes :
airdrop, supplies and equipment—
rigging 210 CFM Davey, trailer-
mounted air compressor, Army tech-
nical manual, 113
rigging typical supply loads, Army
technical manual, 112
designed for controllable gliding flight,
wind-tunnel tests, 11512
opening, scale factors, 16984
- Paradoxes in labor-management relations,
18088
- Paraffins, distillable, identification from coal
tar, 12795
- Paragliders, *see* Gliders (aircraft).
- Paraguay :
agricultural commodities, agreement, 1634
background notes, 1618
foreign trade regulations, 4446
investment guarantees, agreement, 7187
mineral industry, minerals yearbook chap-
ter, 11361
Peace Corps volunteers, agreement, 7178
special study mission, report, 10568
- Parahydrogen, *see* Hydrogen.
- Parajon, Roberto E., and wife, relief, 823,
9209
- Parallax, separations, wedge measures on
large-scale 70-mm. aerial photographs,
16659
- Parallel-T networks, *see* Networks.
- Paralyzed Veterans of America :
incorporate, 16227
legislative program, hearings, 9172
- Paramagnetic resonance, *see* Magnetic reso-
nance.
- Paramagnetism, *see* Magnetism.
- Parameters :
and limitations of explosive welding, study
to establish process, 17999
calculating parameters of long-wave and
ultra-long-wave antennas, USSR study,
15385
choice of influence functions using analog
computer, USSR study, 1181
design, and cost of heat exchangers, evalua-
tion of computer usage, 14324

Parameters—Continued

- fissionable materials systems and nuclear safety, USSR book excerpts, 15408
- for predicting maximum surface temperatures of wood in exterior exposures, 1096
- helium-neon laser discharge parameter study, 17086
- hydraulic, effect on analysis of chugging, 11491
- jet streams and forecasting instructions in Kazakhstan, USSR, 4994
- kinetics, of 6 ablation polymers, determination by thermogravimetric analysis, 8896
- lumped-parameter systems, method of relating modal damping to local dampers, 5228
- mercury droplet, including effects of gravity, photographic study, 1509
- normal human serum, for simulated altitude and aerospace flights, 7341-42
- parametric studies—
 - advanced multistage axial-flow compressors, 11419
 - cost of multistage flash process, 15329
 - low-density charring ablator, 2713
 - one mgd brackish water reverse osmosis plant (spiral module concept), 9590
 - serum of normal humans, parameters for simulated altitude and aerospace flights, 8868
 - thermoelectric couples, USSR study, 1241
 - tracking system, human performance measured with version of crossover model, 17944
 - ultrasonic propagation measurements, systematic errors, iterative reflection-interferometry method evaluated, 9983
- Parametric up-converter increases flexibility of maser, 9859
- Parapsychology:
 - psychotronics, Trojan horse of irrationality?, USSR study, 11259
 - report, USSR, 9659
- Parasites:
 - copepod crustaceans on teleost fishes of Hawaiian Islands, 11603
 - genus *Gloioptex* and new species, host specificity and intraspecific variation, 11607
 - Nearctic, of genus *Rhyacionia*, key, with species annotations, 16649
 - protozoa, subject catalogue, 15
 - Parastrophe pollex, *see* Crustaceans.
- Parawings, *see* Wings (aircraft).
- Parcel post, agreement and regulations of execution with Ethiopia, 17239
- Parental solutions, *see* Solutions.
- Parents:
 - deceased veterans, liberalize payments, law, 443
 - divorced or separated, income tax support test in case of children—
 - law, 16134
 - reports, 2022, 2099, 7693, 15091
 - helping parents teach young children, note to agents, 4763
 - parents and babies, note to agents, 4764
 - parents and teenagers, note to agents, 4765
 - parents of Peace Corps volunteers, special message, 5383
 - points for participation in Head Start child development programs, 10912
- see also* Families.
- Paris, France:
 - Air Show—
 - news fillers, 8225
 - newsletter, 8226
 - Parity, *see* Prices.
- Park, Jeanne S., service, USDA's report to consumers, 3873
- Park, Stephen E.; equilibrium thermodynamic properties of high-temperature nitrogen, alkali-metal vapor mixture, 16974
- Park County, Wyo., Adam Weiss Peak quadrangle, geology, 2360

- Park Range, atmospheric water resources program, phase 1, 11774
- Park River and Valley:
 - basin, engineer report—
 - departmental edition, 15225
 - document edition, 15059
- Parke County, Ind., soil survey report, 13127
- Parker, Evelyn E., cancer chemotherapy reports, 3076
- Parker, James F., Jr., prototype specification for preparation of military flight manuals, 2784
- Parker, John G., rare-earth minerals and metals, 5123
- Parker, Lee W., theory of electrostatic planar and spherical probes, 6722
- Parker, Raymond L., composition of earth's crust, 12606
- Parker, Richard J., bearing torque and fatigue life studies with several lubricants, 11509
- Parker, Roy A., relief, 12354, 13618, 16123
- Parker, W. Russell, family housing for migrant agricultural workers, 11924
- Parker, William B., soil survey, Randolph County, Ala., 18215
- Parkevich, Valentina S., relief, 13773, 16203
- Parkfield, Calif.:
 - earthquake, June 27, 1966, seismological and engineering report, 1934
 - earthquakes of June-Aug. 1966, surface geologic effects, etc., 9574
- Parkhurst, Raymond T., commercial boller production, 5023
- Parking Advisory Council, D.C., establish, report, 13802
- Parking Board, D.C., establish, report, 13802
- Parking of vehicles:
 - facilities, establishment in D.C., report, 13802
 - House side of Capitol, create select committee to regulate, report, 12274
- Parkinson, Fred L., evaluation of high energy rate forged gears with integral teeth, 8898
- Parkinsonism, Parkinson's disease, progress in research, 18181
- Parkinson's disease, *see* Parkinsonism.
- Parkman, Francis, 3-cent regular postage stamp (poster), 15644
- Parks, Greenspan grants to provide more space, general information, 5672
- see also* Education parks—National parks.
- Parolees:
 - reentry of offender into community, 8791
 - under supervision of Federal probation system, 15821
- Parotid fluid, *see* Saliva.
- Parr, S. C., aerial radiological measuring survey of area, 1781
- Parra, Juan F. A. Lamas y, *see* Lamas, Juan F. A.
- Parrish, Paul H., soil survey of Columbia County, Pa., 11804
- Parsley, production, 4110
- Parsnips, growing, information, 5643
- Participation sales act, *see* Credit.
- Particle board, *see* Pulpboard.
- Particles:
 - absorptive properties of small particles, 5182
 - atmospheric, improved analyzer, 15529
 - charged, activation analysis, 1793
 - dispersed fuel particles in beryllium oxide matrix, status of development, 7421
 - experiments to investigate particulate materials in reduced gravity fields, 18000
 - high speed, penetration mechanics, multivariable analysis, 6708
 - hydrodynamic characteristics, forces on sphere moving steadily along circular path in viscous fluid, 10258
 - iron, at meteoric velocities, ionization probability, 11406

Particulates—Continued

- measurement of natural particulate fallout onto high polar ice sheets, Antarctic and Greenland cores, 17374
- photographic method measures size and velocity in fluid stream, 6826
- size—
 - cleanroom air sampler counts, categorizes, and records, 14409
 - statistical analysis, 10017
- see also Alpha particles.
- Partnership for health, 13086, 15702, 17156
- Partnership for planning, 7080
- Partnerships, income tax returns, statistics, 6461
- Parts, computerized parts list system coordinates engineering releases, parts control, and manufacturing planning, 17929
- Pasayten Wilderness:
 - designate—
 - hearings, 15163
 - report, 17631
- Pascagoula River and Valley:
 - ground water resources of basin, Mississippi and Alabama, 11190
- Tallahala Reservoir, engineer report—
 - departmental edition, 13983
 - document edition, 13557
- Paschell, William, sheltered workshops, pathway to regular employment, 6593
- Pase, C. P., helicopter-applied herbicides control shrub live oak and birchleaf mountain mahogany, 14111
- Passaglia, Ello, standard light-sensitive paper for calibrating carbon area used in testing textiles for colorfastness to light, 12981
- Passaic, N.J., area wage survey, 15438
- Passenger traffic. U.S. and foreign countries, 3822, 4910, 12633
- Passenger trains, see Railroads.
- Passengers:
 - transportation survey. 1963 census of transportation, 10343
 - travel between U.S. and foreign countries, 3822, 4910, 12633
- Passports:
 - diplomatic courier visas, amending agreement with Rumania, 15789
 - information for applicants, 7148
 - summary of statistics, 3920
 - United States, fees charged by foreign countries for visa, list, 7145
 - visas, waiver of nonimmigrant fees, agreement with Japan, 2919
 - you and your passport, application requirements, care, etc., 10096, 18226
- Paste soap, see Soap.
- Pasteurization:
 - milk, facts, 14746
 - radiation—
 - Gulf shellfish, 13341
 - Pacific crab and flounder, 13348
 - seafoods, effect of irradiation on microbial flora surviving, 1800
- Pastry, baking, Army technical manual, 1770
- Pasture crops, see Forage plants.
- Pasture lands:
 - cattle in woods or woods in pasture, 14093
 - Kansas and Oklahoma, bluestem and Osage pasture report, 14692
 - trefoil production for pasture and hay, 14741
- Patagonia Union High School District, Ariz., convey land to, hearings, 16303
- Patch, R. W., approximation for radiant energy transport in nongray, nonscattering gases, 11544
- Patent advisers, examination announcements, 205, 17453
- Patent examiners:
 - examination announcements, 16075, 17461
 - manual of procedure, 2786-88, 3538, 5371, 7034-35, 8608-9, 10022-23, 11688, 15642

Patent Office:

- activities (address), 5372
- administration, investigation, authorization, report, 4604
- annual report, 7032
- appeals in patent and trademark cases, amend U.S. Code, report, 877
- changes in, and patent procedures and their significance for design engineer (address), 10020
- classification bulletins, 2785, 5368
- classification information series, 5369, 8604-5, 11684, 13043-46, 17104-108, 18117-134
- decisions, 1966—
 - departmental edition, 8606
 - document edition, 7592A
- laws, investigation, report of subcommittee work, 9285, 13789
- official gazette, 8650
- patent reform act of 1967, message from the President, 6001
- press releases, 3750
- progress and program plans (address), 2789, 14601
- trademarks, index, 10021
- Patent System, President's Commission on, see President's Commission on Patent System.
- Patents:
 - answers to questions frequently asked about patents, 8610
 - appeals cases adjudged, 12437
 - appeals cases, amend U.S. Code, report, 877
 - changes in Patent Office and patent procedures for design engineer (address), 10020
 - classification, 3650
 - classification manual, 3536
 - replacement pages, 7033, 8607, 14600
 - code of Federal regulations, 9477
 - current legislation, President's Commission, and other developments in our patent system (address), 11685
 - decisions—
 - weekly, 3650
 - yearly, 1966—
 - departmental edition, 8606
 - document edition, 7592A
 - Eastern Utilization Research and Development Division, list, 7264, 15831
 - examining procedure manual, 2786-88, 3538, 5371, 7034-35, 8608-9, 10022-23, 11688, 15642
 - Government policy—
 - annual report, 2240
 - hearings, 2127
 - in official gazette, 3650
 - index 1966—
 - list of patentees, 11686
 - subjects of invention, 11687
 - international patent cooperation (addresses), 5370, 5372
 - international patent structure (address), 13047
 - law, revision, subcommittee work, reports, 9285, 13789
 - laws, investigation, authorization, report, 4604
 - National Aeronautics and Space Administration, policies, evaluation, 6043
 - new, correlation function measurement and infrared frequency, USSR studies, 9647
 - Northern Utilization Research and Development Division, list, 7263
 - patent cooperation treaty, terms, effects (address), 14605
 - patent practices and other measures, USSR agricultural academy discussion, 1207

INDEX 1967

Patents—Continued

- patent reform act—
 - international and national benefits (remarks), 11689
 - international aspects of patent regulations (address), 14603
 - message from the President, 6001
- patent reform bill—
 - and patent cooperation treaty needed (address), 16095
 - means progress (remarks), 13048
 - proposed changes in law (address), 16091
- publications, price list, 5418
- Southern Utilization Research and Development Division, semiannual list, 17, 8812
- Soviet engineering, 9628, 9648
- waiver petitions, findings of fact, etc., of NASA Inventions and Contributions Board, 2731, 3684, 11577
- Western Utilization Research and Development Division, semiannual list, 16, 11925
- Paterson, N.J., area wage survey, 15438
- Pathfinders from the stars, new scientific documentary film, announcement, 16085
- Pathochemistry of hemoglobins, 14215
- Pathogenesis:
 - cystic lymphadenopathy of rats due to Rous sarcoma virus, USSR study, 6564
 - infectious process, USSR studies, 6573
 - radio-resistance, virulence and culture characteristics, effect of repeated treatment with gamma rays, 12018
- Pathologic Anatomy Branch, National Cancer Institute, histopathology laboratory procedures, 15689
- Pathological effects of thyroid irradiation, 11029
- Pathologists, forest and forest products, examination announcement, amendment, 8985
- Pathology:
 - dwarf mistletoe parasitizing true firs in California, 5685
 - laboratory profile of 283 healthy male adults, 7347
 - molecular bases, USSR study, 11267
- Patients:
 - aeromedical evacuation, patients' views of patient care, 17350
 - Clinical Center, NIH—
 - admission procedures, 13069
 - normal volunteer patient program, handbook, 7067
 - normal volunteer, people with a purpose, 7081
 - referral procedures, 10044
 - community mental health center—
 - inpatient services, 11727
 - outpatient services, 11728
 - discharged from Public Health Service hospitals, diagnostic and demographic data, statistical summary, 8629
 - in mental institutions, 1587, 5454-55, 11749, 17157
 - mental hospitals, State and county patient movement and administrative data, 15697
 - neur dermattitis, treating with electro-sleep and hypnosis, USSR excerpt, 17874
 - personal care in homemaker services, report of conference, 5460
- Patman, Wright, portrait unveiling, proceedings, 4465
- Patrick V. McNamara Federal Office Building, Detroit, Mich., name, reports, 670, 886, 10727, 17577
- Pattern recognition, system identification and pattern recognition, 9810
- Patterns:
 - alterations, guide for leaders in clothing programs, 15856
 - heliport standard marking, development study, 17734

Patterns—Continued

- hide trim pattern for domestic cattlehides, standard of trade, 5283, 8517
- progress in aging, case study (series), 4082
- signal patterning, effects upon performance and responses, 8585
- Patterns of living and housing of middle-aged and older people, research conference, proceedings, 14634
- Patterson, James L., Missouri River basin floods, 1129
- Patterson, Sam H., bauxite reserves and potential aluminum resources of the world, 8154
- Patterson, Viola W., FAA air traffic activity, 16550
- Patterson, Eagle, Greenough & Day, relief, 7662
- Paul Kelly Flying Service, Inc., accident, 17060
- Paul, Roger A., trace elements in common rock types and their relative importance in neutron-induced radioactivity calculations, 1799
- Paul, D. C., Project Sealab report, experimental 45-day undersea saturation dive at 205 feet, 11669
- Paulk, John, solar array regulators of Explorer satellites XII, etc., and Ariel 1, 12927
- Paulson, Helen M., performance of Farnsworth Lantern at Submarine Medical Research Laboratory, etc., 16845
- Paulus, Panagiotis, relief, 16201
- Pavements:
 - airfield and heliport—
 - evaluation concepts, technical manual, 7392
 - flexible pavement, evaluation, technical manual, 4216
 - rigid pavement, evaluation, technical manual, 7393
 - airfields—
 - design, general provisions, technical manual, 4215
 - evaluation concepts, technical manual, 10275
 - rigid pavement, evaluation, technical manual, 5744
 - airport paving, 12486
 - concrete, emergency construction, standard practice, Army technical manual, 1769
 - evaluation for frost conditions, technical manual, 5741, 5743, 7394
 - flexible design for roads, streets, walks, and open storage areas, emergency construction, Army technical manual, 10277
 - portland cement concrete, Dynaflect for non-destructive testing, evaluation, 16524
- Paving, see Pavements.
- Pawlick, Eugene V.:
 - dynamic characteristics of electron-bombardment ion thruster, 18033
 - electron bombardment ion thruster, accelerator grid durability tests, 14462
- Pawson, David L., psolid holothurian genus Lissothuria, 8550
- Pawtucket, R.I.:
 - area wage survey, 14290
 - relief, report, 9082
- Paxton, P. Price, public library program amendments of 1966, 1135
- Pay, see Pay, allowances, etc.—Salaries—Wages.
- Pay, allowances, etc.:
 - airman jobs, merited grade versus merited pay rankings, 7339
- Armed Forces—
 - allotments to savings for persons missing in action, etc., reports, 16266, 17626

Pay, allowances—Continued
 Armed Forces—Continued
 increase basic pay, message from the President, 9069
 combat pay, exclusion for commissioned officers in combat zones, increase, law, 452
 erroneous payments to military personnel for storage of household goods—
 law, 486
 report, 4589
 members of armed services, claims arising from correction of records, provide statute of limitations on payments, report, 2016
 per diem, to Coast Guard members assigned to Reserve Training Center, Yorktown, Va., refunds, payment to estate—
 law, 441
 report, 927
 uniformed services—
 increase basic pay, hearings, 17592
 members, travel, transportation, and education allowances for dependents' schooling—
 hearings, 10636
 reports, 10569, 12245
 United States Code, title 37, amend—
 law, 17537
 reports, 7706, 14942, 15089
 veterans, education allowance increase—
 hearings, 7758, 10859
 law, 16133
 report, 10792
 see also Travel.
 Payments:
 home mortgage payments, FHA guidelines, 6428
 how to avoid delays in payment, guide for contractors, 17698
 medical insurance claims under medicare, methods, 7127
 Payne-Gaposhkin, Cecilia, variable stars in Small Magellanic Cloud, 2859
 Payroll deductions, for Federal employees, report, 16355
 Payrolls:
 compensation expenditures and payroll hours—
 motor passenger transportation industries, 17893
 pipeline industry, 11310
 PCMR, *see* President's Committee on Mental Retardation.
 Pea aphids, alfalfa, how to control, 7274
 Peabody, Endicott, nomination, hearing, 9305
 Peace:
 food for peace act of 1966, law, 512
 in search of peace, basic goals of United States foreign policy, motion picture announcement, 7149
 nation building and peace building (address), 14209
 organizing the peace (address), 2882
 search for peace—
 5-cent commemorative postage stamp (poster), 11694
 in Viet-Nam, 8714, 14672
 southeast Asia, resolution to promote maintenance of international peace and security, hearing, 954
 United Nations peacekeeping dilemma, 10835
 war or peace in Middle East, study mission report, 10837
 water for peace, international conference, organize and hold in U.S., 1967—
 law, 503
 reports, 700, 2092
 Peace Corps:
 act, amend—
 hearings, 10833, 16326
 reports, 634, 10757

Peace Corps—Continued
 advance training, program for college juniors, 5373
 annual report, 7036
 appropriations, 1967, law, 405
 appropriations, 1968—
 budget amendments, 12203
 hearings, 15014
 biographic register, 14670
 community development, by people, for people, 5375
 fact book, 5382
 field staff, Foreign Service list, 3349
 graduate students, 5376
 health workers, 5377
 language, breaking sound barrier, 5378
 liberal arts graduate, answer to what can I do in Peace Corps, 5374
 married couples in Peace Corps, two's company, 5379
 math & science teachers, 5380
 older volunteers, 5381
 parents of Peace Corps volunteers, special message, 5383
 Peace Corps volunteer (periodical), 3678
 press releases, 3751
 program directory, 7037
 quarterly statistical summary, 3802
 sports and recreation, 5384
 teaching, from rote to reason, 5385
 volunteers, agreement with—
 Antigua, 13146
 Central African Republic, 7186
 Chad, 2925
 Dahomey, 17237
 Dominica, 11850
 Gambia, 7193
 Guyana, 15787
 Korea, 2928
 Mauritania, 7177
 Paraguay, 7178
 St. Christopher, Nevis, and Anguilla, 11851
 St. Vincent, 11853
 Peaceful engagement with the East, address, 234
 Peach County, Ga., soil survey report, 14656
 Peaches:
 dried, U.S. standards for grades, 13895
 packinghouses, layout guidelines, 7247
 phony disease, control, 5641
 production, use, value, 1965-66, by States, 14695
 Peanut butter, good choice for thrifty family, food value, use, recipes, 9345
 Peanuts:
 acreage allotments, transfer—
 hearing, 13692
 report, 14948
 farmers' stock, cost of storing and handling in commercial facilities, 10923
 market news—
 price summary, 16443
 weekly report, 3677
 outlook for 1966-67 (talk), 4705
 stocks and processing, 3678, 18235
 Pearl, Robert B., paper, Apr. 25-May 2, 1966, 5885
 Pearl River and Valley:
 improve conditions, engineer report—
 departmental edition, 2216
 document edition, 1999
 Pears:
 dried, U.S. standards for grades, 13896
 marketing orders, amend law, hearing, 13693
 prepackaging at shipping point, 1703
 production, use, value, 1965-66, by States, 14695
 Pearson, Elmer G., water resources summary for southern California, 1127, 12616
 Pearson, Gregory L., water supply outlook and Federal-State-private cooperative snow surveys for Utah, 4050

INDEX 1967

- Pearson, Henry A., relationship between timber and cattle production on Ponderosa pine range, Wild Bill Range, 16652
- Pearson, John E., natural environment radioactivity from radon 22, 17140
- Pearson, Richard G., performance tasks for operator-skills research, 1821
- Pearson, Robert C., mineral resources of Ventana primitive area, Monterey County, Calif., 12604
- Peas:
dry split, good choice for thrifty family, food value, use, recipes, 9346
fresh, rail shipments study, 5646
processed, composition and flavor modification, 1917
- Peasants, mountain peasant life, USSR vignette, 15376
- Pebble-type reactors, *see* Reactors (atomic).
- Peibly, Harry E., Jr., plastics in government, 2155
- Pecan, insects and diseases, control, 1679
- Peek, John H., Upper Ordovician formations in Maysville area, Ky., 2361
- Pectinids, *see* Scallops.
- Pedagogy, *see* Education.
- Pederson, John R.:
costs and economies of scale in egg-type chick hatcheries, 5649
prices and price spreads for eggs, frying chickens, and turkeys in 12 major cities, 11943
- Pederson process, *see* Alumina.
- Pediatrics, *see* Children.
- Peening, *see* Shot peening.
- Peering across the generation gap, 15214
- Pegases, *see* Satellites.
- Pegmatite, ternary diagrams of quartz-feldspar content of pegmatites in Colorado, 1111
- Pelshan Desert, geographical study, 2434
- Pejovich, Svetosar, role of technical schools in improving skills and earning capacity of rural manpower, 5040
- Pelagic amphipods, *see* Amphipods.
- Pelagic fur seal investigations, 14062
- Pelecypoda, mesozoic, Otapiria Marwick and Luperella Imlay, new genus, in United States, 8175
- Pelican (fishing vessel):
exploratory collection made in southwestern North Atlantic, 1956-60, correction, 8035
- Pell, Claiborne, study mission to East Berlin, Bulgaria, etc., report, 7809
- Pen barns, *see* Barns.
- Penalties:
civil rights, interference with, amend U.S. Code—
hearings, 17658
reports, 12283, 14951
collecting, Justice Dept. policies and procedures, GAO review, 11154
criminal, for making certain telephone calls in D.C., report, 9128
flag desecration—
hearings, 10661
reports, 12257, 12264
riots, inciting—
hearings, 15165, 16419
reports, 12282, 13664
thefts from interstate pipelines—
hearing, 2110
law, 377
report, 892
- Penalver, Rafael A., relief, 9203, 12147, 12215
- Pendarvis, J. M., Jr., relief, 355, 564, 786
- Pendleton, Alfred M., ginning cotton to preserve fiber quality, 16568
- Pendulum sclerometer for surface hardness studies, 11381
- Penetrometers:
dynamic response to impact loadings of acceleration sensors having various mounting characteristics, 11521
- Penetrometers—Continued
technique to lunar surveying staff concept, experimental study, 11503
use for measurement of dynamic characteristics of soils, 14396
- Penitentiaries:
national, study—
authorization, report, 4607
report of findings, 12363
- Penland, Jim A., aerodynamic characteristics of axisymmetric, low-fineness ratio axisymmetric, low-fineness-ratio reentry shapes, 14485
- Penner, Omer, relief, 13570, 17496
- Pennington, Jack E., pilot-controlled docking of Apollo command and service module with lunar module, 2689
- Pennsylvania:
census of agriculture, 1964, State and county statistics, 7505
census of manufactures, 1963, area statistics, 1849
census of mineral industries, 1963, area statistics, 4296
climaticological data, 3096
congressional districts, 90th Congress, 1888
county business patterns, 4317, 13380, 17428
distribution of Government-donated food commodities, GAO report, 6381
electric rate book, 14029
judgeships, temporary, for eastern district—
law, 17544
reports, 13834, 16236
mineral industry, minerals yearbook chapter, 8362
northeastern, Upper Silurian and Lower Devonian stratigraphy, 11167
precipitation data, hourly, 3401
southeastern Swatara Creek basin, evaluation of hydrologic system, 16703
women workers, 5610
- Pennsylvania anthracite, *see* Coal.
- Pennsylvania Avenue Commission, establish, report, 9266
- Pennsylvanian period:
Big Snowy and Amsden groups and Mississippian-Pennsylvanian boundary in Montana, 15309
Upper, Fusulinidae from Grafrod formation and Winchell limestone, Canyon Group, Brown County, Tex., 12615
- Pennywise teenagers, 15215
- Penobscot County, Maine:
bedrock geology of Shin Pond and Stacyville quadrangle, 17825
Island Falls quadrangle, bedrock, geological-geophysical investigations, 6401
- Pensions:
Canada, legislation, 5516
code of Federal regulations, 11043
corporate funds, issues raised by 1960 report of President's Committee (remarks), 16123
dependency and indemnity compensation to widows for service-connected deaths of their husbands, amend U.S. Code—
law, 367
report, 901
District of Columbia police and firemen—
equalize benefits for totally disabled, report, 9129
retired members, eligibility of widows to survivor benefits, provide, report, 10558
employee, annuity, etc., income tax, 9596
laws, compilation, 1991
Lighthouse Service—
former employees, increase, report, 12256
widows of former employees, increased annuities, report, 12253

Pensions—Continued

Lighthouse Service—Continued
 widows of former professional employees, provide annuities, report, 12254
 military disability severance pay, recoupment requirements, modify, report, 14940
 plan, agreement with Canada, 15769
 private plans—
 OASDI beneficiaries, income status, 5514
 self-supporting Federal reinsurance program to protect employees, establish, hearing, 950
 vested benefits, 5501
 public employee retirement systems, benefits and beneficiaries, 11798
 publications, price list, 17135
 retired servicemen's family protection plan, 7375
 veterans—
 cost of living adjustments, hearings, 17592
 enlisted men, credit Inactive Reserve service, report, 16270
 income limitations, hearings on miscellaneous bills, 17613
 laws, compilation, 755
 non-service-connected—
 additional wartime benefits, hearings, 7759
 pension and readjustment assistance act of 1967, report, 7712
 service connected death, liberalize payments to parents and children, law, 443
 Vietnam era readjustment assistance act, reports, 4507, 4596
 veterans' pension and readjustment assistance act of 1967—
 law, 16133
 report, 14963
 welfare and pension plans disclosure act—
 administration, 1966, report of Secretary of Labor, 12764
 amend with respect to filing of copies and making affidavits, hearings, 4531
 questions and answers, 14278
 reporting and bonding provisions, administration and enforcement, Labor-Management Services Administration, Labor Dept., GAO review, 8141
 see also Civil service pensions.
 Penstocks, welded steel, design, construction, etc., 17178
 Pentaborane, toxic, alterations in tissue amines, modified by hydrazines and propylamines, studies, 7357
 Pentagon, general information, 4229
 People with a purpose, 7081
 Pepelko, William E.:
 effect of different inert gases and low normoxic environments on oxygen uptake in mice, 76
 energy metabolism of rats born and raised in low-pressure pure oxygen environment, 5709
 long-term effects of oxygen environment on rat colony at 210 mm. Hg absolute, 1740
 Pepon, Albert M., relief of widow, 13727, 16127, 16168
 Pepper, Leonard, deleterious effects of form lumber on concrete surfaces, 13988
 Peppers, bell, Botrytis rot, 34
 Pepsin, structure, X-ray studies, USSR, 12725
 Peptides, polypeptides and polymers related to collagen, USSR studies, 14270
 Pequonack River and Valley:
 basin, flood control, etc., engineer report—
 departmental edition, 2217
 document edition, 2076
 Perakis, Katherine M., relief, 356, 611, 845
 Percentage of filled fourwing saltbush seeds, 11128

Perception:

color-name as function of stimulus intensity and duration, 14320
 depth—
 equidistance judgments in vicinity of binocular illusion, 139
 problems, 138
 stereoscopic angle and its relationship to standard Air Force tests, 70
 effects of sensory deprivation on sensory, perceptual, motor, cognitive, and physiological functions, 8419
 visual, adaptation to visual and nonvisual rearrangement, 5167
 see also Color perception—Sight—Tactual perception.
 Perchlorates of nitrogen-containing bases, USSR study, 2458
 Pereira, Alfredo, relief, 12853, 16216, 17517
 Perez, Antonio L. Navarro, see Navarro, Antonio L.
 Perez, Armando, relief, 10713, 16191, 17505
 Perez, Felix H., see Hurtado Perez, Felix.
 Perez, Lucio A. Travieso y, see Travieso y Perez, Lucio A.
 Perez, Ortelio Rodriguez, see Rodriguez Perez, Ortelio.
 Perforations in jet engine supersonic inlet increase shock stability, 2655
 Performance (psychology):
 arousal as factor in reminiscence, 9981
 measuring human operator with parameter tracking version of crossover model, 17944
 nonverbal mediation, code transformation task that provides performance measures (COTKAN), 16916
 Performance capabilities of small grating spectrometers, 1549
 Performance ratings, see Efficiency ratings.
 Performance, story of the handicapped, 3680
 Performance tests, see Flowmeters—Helicopters—Mental tests.
 Performing arts:
 cultural presentations, USA, 1965-66, report, 17226
 Lincoln Center's student program opens new world to teenagers, 12465
 Perfumes, synthetic perfume materials, production and sales, 14703
 Perinatal mortality, see Death.
 Periodic solutions, see Mathematics.
 Periodicals:
 American agricultural, current, selected list, 14505
 Army Library, selected literature, list, 3567
 catalog of copyright entries, 10880, 16451
 general, currently received in Department of Labor Library, 5034
 Government, price list, 5414, 10039, 15670, 18150
 Labor Statistics Bureau, coverage of labor world, list, 1363
 magazine reprint MR series, 3532
 military, Air University Library index, 3014
 received in NIH library, 11757
 Periodontal disease:
 parotid fluid flow rate and periodontal status in human, 11965
 pyorrhea and other gum diseases, research explores, 2819
 Periodontal status in relation to parotid fluid and serum glucose levels, 4178
 Peripheral nerves, see Nerves.
 Peripheral vision displays, 12865
 Perishable agricultural commodities act, see Agricultural products.
 Perishables, see Agricultural products.
 Perkins, R. B., adhesives, sealants, and gaskets, survey, 5195
 Perlman, Robert, neighborhood service centers, 5595
 Perloff, Stephen H., salaries for selected occupations in services for the blind, 2499

INDEX 1967

- Permafrost:**
 geology of CRREL tunnel, Fairbanks, Alaska, 17378
 perennially frozen ground, 1756
- Permanent Subcommittee on Investigations,**
see Government Operations Committee, Senate.
- Permeability:**
 and elutriation methods for determining specific surface of dry chemical fire-extinguishing powders, 11678
 curves of concern to reservoir engineers, 14360
 porous permeable rock for nuclear waste disposal, 9778
 requirements of membranes for use in desalination by reverse osmosis, 15331
- Permian period:**
 paleotectonic investigations of Permian system in United States, 16691
 Permian tethyan fusulinids from California, 16699
 rock units in Glass Mountains, west Texas, nomenclature, etc., 1113
- Permits, see** classes of persons to whom, or subjects for which, permits are issued.
- Pernas-Becelro, Daniel,** relief, 9197
- Perry, Barbour L.:**
 aircraft landing approach paths with rainbow optical landing system, 5346
 altitude rate command system, 9997
 shadow box optical landing system, 11680
- Perry, John J.,** landing task in jet trainer with restricted fields of view, 11553
- Pershing, John J.:**
 memorial in District of Columbia, erection—
 hearing, 740
 law, 490
 trophy, NGB announcement of winners, 14522
- Persian Gulf:**
 exploited by British and U.S. petroleum monopolies, 1188
 lights and fog signals, list, 5332, 9973, 14579
- Persimmons, production, use, value, 1965–66, by States, 14695**
- Personal and family survival, civil defense adult education course, student manual, 1905**
- Personal communication system combines high performance with miniaturization, 11456**
- Personal property:**
 American Academy in Rome, increase amount—
 law, 16135
 report, 14966
 claims by employees of government of District of Columbia, settlement, report, 10610
- Federal surplus, for health, educational, and civil defense purposes, how to acquire, 12621**
- Government owned, in U.S. territories, etc., inventory report, 4540**
- surplus, how to buy from Defense Dept., 10897**
- Personnel, see** Social workers.
- Personnel administration, see** Administrative management.
- Personnel management, see** Administrative management.
- Personnel management series, 14871**
- Personnel Management Training Center, curriculum, administration, etc., 4405**
- Personnel manual, see** Civil service.
- Personnel Research Laboratory, technical reports, 4170–72, 5705, 7339, 11951–952, 13267–268, 15891–893, 17343–345**
- Personnel workers, school pupil, certification requirements, 9396**
- Persons under supervision of Federal probation system, 15821**
- Perspectives in defense management (periodical), 12658**
- PERT, see** Program evaluation and review technique.
- Perturbations:**
 modifications in Brouwer's theory of general perturbations in rectangular coordinates, 2703
 perturbation times in alkali-halide systems, 9996
 random, effect on stability of attitude control systems, 11399
 rounding error bounds by perturbation-condition analysis, 16978
 singular perturbation problems with application in viscous flow, asymptotic expansions method, 9885
 small, techniques, solve problem of oscillating cone in supersonic flow, 6849
- Peru:**
 air transport services, agreement, 2912
 establishing business in, 231
 loan of vessels, extension, agreement, 2939
 mineral industry, minerals yearbook chapter, 11364
- Pest Control, Federal Committee on, see** Federal Committee on Pest Control.
- Pesticides:**
 agricultural and household, safe use, 4098
 chemistry and technology research, USSR study, 15350
 chlorinated hydrocarbon, identification and measurement in surface waters, 4800
 documentation bulletin, index to literature on pest control (periodical), 5683
 equipment for applying soil pesticides, 14735
 farmers' checklist for pesticide safety, 5668
 farmers' expenditures for, 6171
 health information, 15687
 monitoring journal (periodical), 11008
 organic phosphorus pesticides, commercial names, shipping containers, etc., technical reference, 9734
 organophosphorus, poisoning, detection using automated method, 15351
 pesticides and pesticide-related activities of USDA, 1966, progress report, 7294
 pesticides and related products, production and sales, 8766
 protecting honey bees from, 7275
 registered agricultural chemicals, summary of uses, supplement, 8815
- residues—**
 agricultural, monitoring, preliminary report of studies, 4086
 cleanup and confirmation of identity by thin layer chromatography, 13200
 in foods—
 analytical manual, 16640
 report, 15274
 review, 20
- Pests:**
 agricultural inspectors outwit foreign pests, 4138
 control, engineered performance standards, handbook, 11625
 forest pest leaflets, 4820–21, 9529, 11104–105, 12567, 15278, 16646–647, 17793–796
 intercepted plant pests, list, 7250
 our struggle against, introduction for American youth, 1716, 7290
 plant—
 control, scientific careers, 13229
 guard against for beautiful America, 1713
 Plant Pest Control Division programs, 11921
 plant pest control inspectors, examination announcement, 211
 watch for new plant pests, 7285, 8840–42
see also Insects.
- Pet shops, bibliography, 17195**

Petak, L. P., determination of fixed base natural frequencies of shipboard equipments, etc., 11673
 Peter, A. C., define propagation characteristics of finite amplitude acoustic pressure wave, 8421
 Peters, Frank A., methods for producing alumina from clay, evaluation of lime-soda sinter process, 9779
 Peters, James A., lizards of Ecuador, check list and key, 6948
 Petersburg National Battlefield, acquire Appomattox Manor for addition to, revision of boundaries, etc., report, 14962
 Peterson, C. F., propagation at 5GHz in Europe, comparison of predictions and measurements for various types of paths, 6223
 Peterson, Clarence E., instrumentation and automatic control, 1017
 Peterson, Esther :
 addresses, etc.—
 Mar. 10, 1967, 6588
 Oct. 10, 1967, 16796
 pennywise teenagers, 15215
 Peterson, Eugene G., relief, 324, 819
 Peterson, Henry B. :
 engineering observations on MB-5 aircraft fire-fighting and rescue vehicle, 9999
 full-scale fire modeling test studies of light water and protein type foams, 17092
 Peterson, J. R., high-performance once-through boiling of potassium in single tubes at saturation temperatures of 1500° to 1750° F, 15504
 Peterson, James P., structural efficiency of ring-stiffened corrugated cylinders in axial compression, 14479
 Peterson, John J., fatigue behavior of fusion welded wing structure under environment of supersonic transport, 16905
 Peterson, Robert L., finite lattice heat capacity effects on spin-lattice relaxation, 14516
 Peterson, Roger S. :
 limb rust damage to pine, 4848
 sweetfern blister rust, 4823
 Peterson, Roy E., derivation of meteorological body of data covering Northern Hemisphere, 8417
 Petitions for patent waiver, findings of fact and recommendations of NASA Inventions and Contributions Board, 2731, 3684, 11577
 Petrasek, Donald W., tensile properties of dis continuous-fiber composites, 8498
 Petrified Forest National Park, general information, 6981
 Petrography, *see* Rocks.
 Petroleum :
 accumulation in sedimentary rocks, gravimetric effects, 12608
 aircraft engine oil components, identification, use of thin-layer chromatography (TLC), 11674
 census of mineral industries, 1963, industry statistics—
 crude petroleum and natural gas, 5847
 oil and gas extraction, 7465
 oil and gas field services, 1854
 crude oil, market demand forecast, monthly, 3685
 crude petroleum and products—
 minerals yearbook chapter, 5101
 monthly statement, 3686
 Cut Bankfield, Mont., reservoir oil characteristics, 8376
 densities and porosities of core samples from oil wells, Appalachian fields, 11353
 drilling in sea regions, USSR study, 9640
 exploration, relation of mass properties of sedimentary rocks (series), 12608
 handling equipment and operations, Army technical manual, 5746
 heavy crude oil, resource, reserve and potential production in United States, 17912

Petroleum—Continued
 high boiling fractions, sulfur compound characterization studies, 2583
 industry—
 cost competitiveness for energy sources of future (remarks), 6439
 injury experience, 16851
 role of Interior Department (remarks), 8208
 interests, procedures to preclude more than just compensation, Engineers Corps, Army, GAO report, 16670
 International Convention for Prevention of Pollution of Sea by Oil, amendments—
 hearings, 745
 text, 5542
 international petroleum annual, 9757
 international petroleum quarterly, 3438
 interstate compact to conserve oil and gas—
 consent of Congress to extend—
 hearing, 15042
 report, 10737
 report of Attorney General, 15431
 Iran attacks oil consortium, 4972
 leases, reinstatement, etc., by Secretary of Interior, hearings, 13708
 Middle East oil crisis, blackmail charged by USSR, 15397
 Middle East oil problems, USSR commentary, 2441
 monopolies, British and U.S., exploit Persian Gulf, 1188
 oil fields, 5-spot waterfloods, computer techniques for predicting 3-phase flow, 15477
 oil industry's role in balance of payments voluntary program (remarks), 228
 oil pollution act of 1924, amend, hearings, 16435
 oil pollution of sea, international control, report, 16234
 oil-producing Arab nations, USSR report, 11254
 oil recovery predicted by waterflood and gas drive, Bradford Third and Sartwell sands, Sartwell oilfield, McKean County, Pa., 11373
 petroleum and related products, specifications and standards, reference list, 10903
 plants, investment and operating costs, bibliography, 14328
 products—
 military supplies, rigging typical load for high velocity airdrop, 8889
 survey (series), 2568-69, 9762, 12811, 16860
 publications, price list, 2803
 recovery of additional oil from water-drive reservoirs, 2574
 reservoir permeability curves of concern to engineers, 14360
 reservoir study of William Kaufman lease Clover-Rush Run oilfield, Roane County, W. Va., 14347
 review of expected supply-demand (remarks), 17847
 secondary recovery of oil by waterflooding, Mitchell and Berea sands, 14361
 statistical reporting improved through standardization of terms, forms, etc. (remarks), 5366
 study, improved continuous electrophoresis apparatus, 9764
 underground combustion oil-recovery experiments in Venango second sand, Reno pool, Venango County, Pa., 11372
 USSR industry, research, 1187
 waterflood performance, theoretical and field, Kane oilfield, Pa., 9769, 12814
 see also Oil shale—Pipe lines.
 Petroleum gases, *see* Gas—Liquefied petroleum gases.
 Petroleum products, *see* Petroleum.

INDEX 1967

Petroleum refineries, United States and Puerto Rico, mineral industry survey, 16472
 Petroleum Transit Corporation, S.C., motor carrier accident, 16874
 Petrology, see Rocks.
 Pettibone, Marian H.:
 bathyal polyoids from central and north-eastern Pacific, 6960
 type-specimens of polychaetes described by Edith and Cyril Berkeley, 5310
 Pettinger, L. F.:
 forest insect conditions in Pacific Northwest, 8053
 insect outbreaks in Oregon and Washington, 2291
 Petty officers, see Navy.
 Pettyjohn, Wayne A., geohydrology of Souris River Valley in vicinity of Minot, N. Dak., 14184
 Pevtsov, Mikhail V., journey to Kashgariya and Kun-lun, translation, 15426
 PF series, 3696
 Pfister, Robert D., maturity indices for grand fir cones, 9534
 Pharmaceuticals, see Drugs.
 Pharmaceutics (USSR periodical):
 translations, 3687
 Pharmacies:
 medical restraint of trade act, hearings, 17661
 medicines and other pharmaceutical preparations which may be dispensed without physician's prescription, Czechoslovakian list, 12673
 physician ownership, hearings, print additional copies, reports, 916, 2030
 Pharmacists:
 information for people almost 65, 5509, 8688
 Public Health Service careers, 15676
 residencies in Public Health Service hospitals, 13087
 R legend, FDA manual, 6360
 Pharmacologists, examination announcements, 14586, 16077
 Pharmacology and clinical use of mercaptamines, USSR study, 8242
 see also Ethnopharmacology.
 Pharmacology Section, N.I.M.H., workshop series, 17173
 Pharmacy, Main Pharmacy Administration of Moldavian SSR, proposals for improving labor organization, 15422
 Pharos experiment:
 clamp system for capacitor bank, 11671
 vacuum clamp switch for capacitor bank, 9984
 Phase angle, standard for accurate measurements at audio frequencies, 6924
 Phase detectors, solid state, replaces bulky transformer circuit, 14442
 Phase diagram:
 hafnium-carbon, investigation, 14340
 magnesium-cerium system, 1414
 Phase relations in uranium monocarbide region of system uranium-carbon-oxygen, 12821
 Phase rule and equilibrium, construction of pressure-temperature diagrams for multi-component systems after method of Schreinmakers, geometric approach, 2359
 Phase shift, antenna simulator permits pre-installation system checkout, 2648
 Phase shifters, heterodyne, with inductive delay line pickup, providing stepless phase shift, design, etc., 16977
 Phase studies:
 boiling bubbles in water, activation, growth, and detachment from artificial nucleation sites of known geometry and size, 14491
 nucleation and growth of ice crystals, 6442
 Phase transitions, use to improve thermo-static control of instruments, 9624
 Phenolic asbestos, see Asbestos.

Phenolic nylon, see Nylon.
 Phenolic resins, see Resins.
 Phenology, pines in Hawaii, 4854
 Phenols:
 chemical safety data sheet, 9683
 transesterification of phosphites and phosphinites, USSR study, 1210
 Phenoxo herbicides:
 acid, determination in water by electron-capture and microcoulometric gas chromatography, 15312
 using effectively, 11929
 Phenylketonuria, bibliography, list, 5906
 Philadelphia, Pa., area wage survey, 9743
 Philately and philatelist, see Postage stamps.
 Philippines:
 agricultural commodities, agreement, 8746
 atomic energy cooperation for civil uses, agreement, 13144
 customs administration, agreement, 10101
 health information for travel, 13078
 investment guaranties, agreement, 5544
 loan of vessels, extension, agreement, 7172
 military bases, agreement, 2916
 relinquishment of certain land areas in Camp John Hay, 11843
 mineral industry, minerals yearbook chapter, 2562
 national service life insurance funds, peso payments—
 law, 372
 report, 905
 petroleum products pipeline, establishment, agreement, 2915
 requirements regarding shipper's export declarations, annex to schedule B, 5897
 sailing directions, change, 7002, 8571, 15629
 telecommunications, radio broadcasting facilities, agreement, 1638
 veterans claims, settlement, agreement, 17234
 Veterans Memorial Hospital, grants-in-aid for medical care, etc., agreement, 14685
 Phillipsburg, Mont., geology and ore deposits of district, 15501
 Phillips, Almarin, evidence on concentration in banking markets and interest rates, 14040
 Phillips, Bert, mechanical absorption of acoustic oscillations in simulated rocket combustion chambers, 5264
 Phillips, C. W., testing and rating refrigerated truck bodies, 17335
 Phillips, Charles R., computer program for analysis of gamma-ray spectra by method of least squares, 8630
 Phillips, John J., site index of Delaware-Maryland sweetgum stands in relation to soil characteristics, 4832
 Phillips, John O., geodetic operations in U.S. and in other areas through international cooperation, 14873
 Phillips, V. Estelle, Air University Library index to military periodicals, 3014
 Phillips, W. M., field birdweed and its control, 14749
 Phillips, W. Pelham, subsonic longitudinal aerodynamic characteristics of 40° semi-apex angle conical reentry configuration, 2701
 Philomedidae, see Crustaceans.
 Philosophy:
 Academy of Sciences, USSR, seminars discuss latest concepts in philosophy and science, 1291
 contemporary problems of bionics and their philosophical significance, USSR studies, 1337
 development of sociological, psychological, political, and scientific theories, USSR study, 5024
 philosophical application of cybernetics in military science, USSR study, 1197

Philosophy—Continued

philosophical problems of natural science, subjects for research, USSR list, 10779
science, development, integrated problem, USSR study, 9674
Phipps, Richard L., annual growth of suppressed chestnut oak and red maple, basis for hydrologic inference, 11171
Phoenix, Ariz., area wage survey, 11329
Phoneme-grapheme correspondences as cues to spelling improvement, 1010
Phonocardiogram simulator, 14434

Photographs:

and record player attachments, current industrial reports, 4323, 12072
Federal item identification guides for supply cataloging, supplements, 3292
Phonons, finite lattice heat capacity effects on spin-lattice relaxation, 14516
Phonorecords, Library of Congress catalog, 15459
Phony peach disease, control, 5641
Phoria, see Esophoria.

Phosphates:

deposits, origin, description, etc., 16687
fertilizer supply, 8819
industry, western, and its resources, evaluation—
trends and outlook, 11371
Wyoming and Utah, 11370
minerals, liberation and concentration by attrition grinding and sizing, 14348
mining, pneumatic vibrating-blade planer test operation, research progress report, 1411
reserved interests of U.S. in lands in Florida, sell to owners of surface thereof, 10526-527, 18165
superphosphates and other phosphatic fertilizer materials, current industrial reports, 3169, 5874
western ores, batch and continuous circuit beneficiation, 9781

Phosphites, and phosphinites, transesterification by monohydric and polyhydric alcohols and phenols, USSR study, 1210
Phospholipases, hemolytic and lecithinase activity, clostridium bacteria toxins effect, USSR study, 15388
Phosphoric acid, electrolyte, water-vapor electrolysis cell, 12858

Phosphorus:

furnace flue dust, extraction of germanium and gallium, 9789
metabolism abnormalities in potassium transport mutant of escherichia coli, 10235
mobilization resulting from conditions of inactivity in *Macaca irus* monkeys, study, 5707
organic phosphorus pesticides, commercial names, shipping containers, etc., technical reference, 9734
phosphoproteins, and phospholipids metabolism in experimental atherosclerosis of liver, USSR study, 1275
stereochemistry of organic compounds, USSR study, 1209
see also Organophosphorus compounds.

Photo interpretation, see Photographic interpretation (military science).

Photoactivation of smooth muscle with ruby laser, 17362

Photobiology, general information, 10311

Photocells, see Photoelectric cells.

Photochemistry, effect of additives on photolysis of poly (methyl methacrylate), 10015

Photocopying, equipment, industrial plant equipment handbook, 4672

Photodegradation of high polymers in solution, 5355, 10015

Photodesorption of oxygen from nickel oxide powder, 18995

Photodiffusion in nerve and muscle cells under effect of local and irradiating excitation, USSR study, 14259

Photodiodes, see Diodes.

Photoelasticity, photoelasto-plastic method to study stress distributions in vicinity of simulated crack, 8406

Photoelectric cells, photocell shadowing technique improves light source detector, 2674

Photogrammetry, aerial, research work on Gulf Stream, 5941

Photographers, photographer's mate 3 & 2, Navy training course, 1545

Photographic apparatus and supplies: consolidated identification list for test evaluation, Federal supply catalog, Defense Dept. section, 3321

Federal item identification guides for supply cataloging, supplements, 3290

photographic equipment, industrial plant equipment handbook, 4672

Photographic film detectors, film badge services, standards of performance, 10047

Photographic interpretation (military science):

different viewing devices for photo interpretation, relative effectiveness, 10283
screening and overlapping imagery, influence on speed and accuracy, 14804
vertical and high oblique, photographs interpretation, 5750

Photographs:

catalog of copyright entries, 968, 2141, 6137, 17682
coronal, from solar eclipse, 11551
earth, pictures from Gemini missions, 12880
lunar orbiter I, mission summary, 8429
National Library of Medicine collection, 14527
point coordinates, laser measuring system accurately locates, 5154
portfolio of science teaching aids, 17158

Photography:

accurately measures rocket engine vibration, 6812
exposure value (EV) system expanded to include filter factors and transmittance, 6765

Lunar Orbiter I, 14394

Lunar Orbiter II, photographic mission summary, 17936

meteors, automatic-reduction procedure for data, 15510

PACAF basic bibliography, 8867

photo identification guide for land and forest types of interior Alaska, 15287

photographic method measures particle size and velocity in fluid stream, 6826

polarized light, used to identify fatigue zones in metals, 9846

process produces accurate registry between circuit board prints, 8476

public information photographic manual, 2769

scientific, Project Sully, 4235

time-lapse, using aircraft for cloud measurements, 10967

U.S. commercial exhibitions, how to photograph, 7566

see also Aerial photography.

Photointerpretation, see Photographic interpretation (military science).

Photoionization, see Ionization.

Photolysis, see Photochemistry.

Photometry:

flame, report, 14518

ground based photometric surveillance of passive geodetic satellite, 11413

spectrograms of 3 artificial meteors, 9902

see also Spectrophotometry.

Photomultipliers, improved design provides faster response time, 2653

Photonuclear reactions, photonuclear data index, supplement, 17034

INDEX 1967

- Photosynthesis, mineral nutrient requirements of *Chlorella sorokiniana* in continuous pure culture, 14779
- PHS, *see* Public Health Service.
- Phthalic anhydride, *see* Anhydrides.
- Phthalocyanine, uranyl compounds for brain tumor therapy, synthesis, 12842
- Physical chemistry, Academy of Sciences, USSR, report, 6579
- Physical education and training, plis please, 1011
- Physical endurance, *see* Physical fitness.
- Physical examinations:
ILO convention concerning medical examination of young persons for fitness for employment in underground mines, 16160
medical advisory boards for driver licensing, 8638
multiphasic health screening techniques for detection and prevention of chronic diseases—
hearings, 2103
print additional copies, report, 2031
report, 2104
youths for military service, analysis of results, 8900
- Physical fitness:
demonstration center schools, project, 18145
exercise performance of man in oxygen-helium atmosphere, 88
for youth, suggested elements of school-centered program, 8617
man's physical endurance and its development, USSR study, 12698
new youth fitness test norms, 5408
physical fitness test, 1561
see also Exercise.
- Physical Fitness, President's Council on, *see* President's Council on Physical Fitness.
- Physical geography:
Communist China, selected papers of 1963 annual conference of Geography Society, 1319
geomorphic effects on earthquake in Martin-Bering Rivers area, Alaska, 2870
physiographic and hydraulic studies (series), 17823
physiographic history and soils, entrenched stream systems, and gullies, Harrison County, Iowa, 1722
- Physical science aids, physical science technician, examination announcement, 13445
- Physical sciences, *see* Science.
- Physical therapists:
careers in Public Health Service, 18155
educational opportunities, Army Medical Service, 4236
- Physically handicapped, *see* Handicapped.
- Physician Manpower Division, its mission and organization, 18160
- Physicians:
Armed Forces appointment and residency consideration program, information bulletin, 12441
Armed Forces medical officers, provide promotion opportunities, report, 14943
Army medical internship, 10294
brain drain into United States, staff study, 15029
electronic aids, USSR study, 1329
employed by District of Columbia, exemption from licensing requirements—
law, 17560
reports, 10559, 16384
hospital-based, services under medicare, reimbursement principles, 7119
medical restraint of trade act, hearings, 17661
medicines and other pharmaceutical preparations which may be dispensed without physician's prescription, Czechoslovakian list, 12673
ownership in pharmacies and drug companies, hearings, print additional copies, reports, 916, 2030
- Physicians—Continued
Physician Manpower Division, its mission and organization, 18160
physician speaks on home care, 7082
physicians' handbook on medical certification, death, fetal death, birth, 13088
Project Head Start and physician, 6165
Public Health Service—
CORD, commissioned officer residency deferment program, 8626
residences, general information, 8648
reporting injuries caused by firearms in D.C., law, 1208
reporting physical abuse of children in D.C., law, 479
residency training—
internal medicine, Veterans Administration Center, Dayton, Ohio, 15818
preventive medicine and dental public health, 7090
role in aeromedical evacuation, 4173
USSR—
medical men discuss economics of public health, 2462
medical worker's day celebration, 2476
- Physicists, examination announcement, 4388
- Physico-chemical modeling of information and thought processes, 1272
- Physics:
Belorussian State University's Physics Department program, 17871
Bulgaria, status and perspectives, 16758
chemical, problems, USSR study, 11257
Communist Chinese abstracts, 3123
earth, 9920
East European abstracts, 3224
high and super-high vacuum physics, scientific and technical conference, USSR, 11250
high energy, 1966 International conference on instrumentation for, proceedings, 7419
high school course, USAFI study guide, 17687
journal of research, National Bureau of Standards, 3458
KWIC index to journal of Health Physics Society, 15694
mathematical, journal of research, National Bureau of Standards, 3459
research, summaries of projects supported by AEC, 12015
scientific tests, standards, publications, price list, 2804
solid-state, new developments, Hungary, 16751
unitary symmetry in Hadron production reactions, consequences, tests, 5759
USSR abstracts, 4031
see also Nuclear physics—Plasma.
- Physiographic and hydraulic studies of rivers (series), 17823
- Physiography, *see* Physical geography.
- Physiological chemistry, *see* Biochemistry.
- Physiological reactions:
and vigilance performance under fixed and variable signal schedules, 14590
space-cabin atmospheres, inert gases, physiological factors, 9523
- Physiologists, examination announcements, 14556, 16077
- Physiology:
analysis of so-called foresight in chimpanzee, USSR study, 1306
aspects of 20 days in full pressure suits, 20 days at 27,000 ft. on 100% oxygen and 34 days of confinement, 6723
basis of methods of increasing labor productivity, USSR study, 16766
bedrest effects, 2595
changes due to bed rest, effects of lower body negative pressure, 7346
contributions of scientists in hygiene, physiology, and scientific organization of labor, USSR study, 16767

Physiology—Continued

- effects of—
 sensory deprivation on sensory, perceptual, motor, cognitive, and physiological functions, 8419
 signal patterning upon physiological responses, 8585
 functions in normal persons, effects of change in nutrition pattern, complex investigations, USSR study, 11281
 measurement of total body hemoglobin by bloodless technique, 10232
 measurements during space travel, USSR study, 8243
 mechanisms of physiological action of organophosphorous compounds, USSR studies, 6512
 medical, compartments, pools, and spaces, symposium, 15959
 medico-physiological incidences on pilot for flight patterns typical of VTOL, 11563
 physiologic baseline studies of zoologic specimens, chimpanzee under restraint, 7351
 physiological research, use of electronics, USSR study, 4964
 programmed physiological measurements and experience of its use on Voskhod spaceship, 6533
 protective efficiency of new prototype disposable passenger oxygen mask, 4248
 responses of pilots to severe weather flying, 5504
 work in space, USSR study, 8247
 P-series, Post Office Department, 1559, 2791, 13056, 17119
 Picketing:
 situs picketing—
 hearings, 10648
 report, 10576
 Pickleworms, how to control on cucumbers, squash, etc., 4116
 Picloram, herbicide for killing chaparral species, preliminary rating, 8085
 Picnic shelters, wood construction, building plan, 5661
 Picnics, food selection, preparation, etc., to prevent foodborne illness, no picnic, 11746
 Picture story series, 4138-39, 8846, 11939, 15872, 17331-332
 Pictured Rocks National Lakeshore:
 establish—
 law, 387
 report, 912
 Pictured Rocks National Lakeshore Advisory Commission, establish, law, 387
 Pictures, see Aerial photography.
 Piedmont region:
 ground water, 9566
 inner belt, N.C. and S. C., minor elements in alluvial magnetite, 8172
 prescribed burning improves loblolly pine seedbeds, 12582
 Pieper, C. W., 20-hour follow-on flight test program, XV-9A hot cycle research aircraft, 7410
 Pierce, Clarence R., determination of tungsten resonance absorption integrals by activation, 18012
 Pierce, Margaret H., cases decided in Court of Claims, 970, 2142, 4663-64, 7840, 12436, 16453, 17656
 Pierce, W. F., medical news letter, 3547
 Pierce Mill, Rock Creek Park, general information, 6982
 Piersma, Bernard J.:
 organic adsorption at electrodes, 10003
 perturbation times in alkali-halide systems, 9996
 Person, Nathaniel H., retail trade, etc., 5591
 Pietri, E. E., analysis of reactor fuel element solutions, 13333

Plezo gages, see Pressure gages.

- Piezoelectricity:
 miniature piezoelectric triaxial accelerometer measures cranial accelerations, 2659
 transducers, mechanical and electrical checkout while installed in system, 2658
 Pigeons, wild, and white winged doves, hunting, possession, transportation, importation in Alaska, 1967-68, Federal regulations governing, 14061
 Piggyback traffic characteristics, 8233
 Pigments:
 light scattering in highly reflecting pigmented coatings, 14392
 synthetic organic, production and sales, 14704
 Pigs, see Swine.
 Pike River, water pollution, control, etc., hearing, 738
 Pillegl, Joseph, commercial fisheries review, 3110
 Pillé, R. J., project fog drops, 6712
 Pillager bands of Chippewa Indians, see Chippewa Indians.
 Pillars (mine), see Mine pillars.
 Pillowcases, current industrial reports, 4339-40, 12080, 17435
 Pilot guides, see Coast pilots.
 Pilot plants:
 Quehanna pilot plant 1st generation process operations, 5777
 study of alkaliized alumina system for SO₂ removal, 12831
 Pilots and pilotage:
 Great Lakes and St. Lawrence Seaway pilotage services, agreement with Canada, 14689
 Great Lakes, 1966, statistical report, 12139
 see also Astronauts—Aviators—Ship pilots.
 Pimientos, canned, U.S. standards for grades, 17681
 Pin connectors, see Connectors (electric).
 Pin oak, see Oak.
 Pinal County, Ariz.:
 geology of Mammoth quadrangle, 11163
 population, special census, 10374
 western, salinity of ground water, 1131
 Pinch, see Plasma.
 Pinchot, Gifford, National Forest, see Gifford Pinchot National Forest.
 Pine:
 Appalachian loblolly grows well in Arkansas Ozarks, 2320
 converting pin oak flat to pine, 14121
 density and height growth in natural slash pine, 15289
 foliage, moisture content, seasonal fluctuation, 2305
 forcing attacks of western pine beetles to test resistance, 8083
 hybrids among pond, loblolly, and pitch pines, 14137
 Jeffrey pine plantation, spread of dwarf mistletoe, trees infected after 22 years, 16658
 knothole, damage from freezing spring temperatures, 8117
 limb rust damage, 4848
 loblolly—
 diameter growth and foliar nitrogen in fertilized soil, 8094
 late planting improves survival, 8119
 seed dormancy influenced by cone and seed handling procedures and parent tree, 8092
 stands, periodic growth near Crossett, Ark., 2324
 thinning from above and below, 8095
 loblolly and shortleaf—
 growing in Midsouth, 8827
 heavy tip moth attacks reduce early growth, 14120

INDEX 1967

Pine—Continued

- lodgepole—
 - butt rot defect and potential hazard in recreational areas, 1093
 - effect of partial cutting in overmature stands, 14090
 - Low stand density speeds tree growth, 11117
 - site indexes with corrections for stand density—
 - instructions for field use, 2333
 - methodology, 14145
 - tree, characteristics, influence on 2 x 4 stud yield, 16654
 - yield tables for managed stands in Colorado and Wyoming, 11140
- longleaf—
 - common plants of bluestem range, 2334
 - from several geographic sources, variation in brown-spot infection, 14118
- Monterey, silvical characteristics, 8113
- Norfolk-Island-pine grown in Hawaii, physical and mechanical properties, 8105
- operational summer planting of slash pine, 15285
- phenology and growth habits in Hawaii, 4854
- Piedmont loblolly pine seedbeds, prescribed burning improves, 125x2
- pinus contorta X banksiana hybrids, early performance, 9533
- pinus ponderosa, performance of 14-year-old hybrids in western Montana, 8067
- ponderosa—
 - bibliography, 17805
 - broadcast seeding on Challenge Experimental Forest, progress report, 16660
 - causes of natural mortality in old growth stands in western Montana, 4830
 - development of progeny in western Montana, 6365
 - planting sites in Southwest, herbicides for preparing, 14110
 - racial variation at Fort Valley, Ariz., 2315
 - reforestation for brushfield reclamation, 4844
 - seed flight, record, 1089
 - southwestern, cutover, occurrence of stem features affecting quality, 14144
 - stands, thinned and unthinned, herbage-timber relationships, differences, 2316
 - tip moth, description, control, etc., 4820
 - transplants in Nebraska, 10-year growth of 2 sources of large grade, 2312
 - trees in Montana, distribution of bark beetle attacks, 11115
 - vener volume and grade recovery in southwest, 14115
 - weight and cubic-foot relationships for Black Hills saw logs, 6370
 - zone of Colorado, cattle diets on native and seeded ranges, 6369
- ponderosa pine-bunchgrass range in Colorado, cattle grazing effects, 14764
- red and jack pine stands, forest floor fuels, 2303
- red, plantation-grown, predicting specific gravity, 8061
- sand, regeneration, shelterwood method, 9539
- shortleaf—
 - seedling inventory methods on broadcast-seeded areas in Missouri Ozarks, 8072
 - stand volume equations, in Missouri, 14094
- slash—
 - do wet- and dry-site ecotypes exist in slash pine?, 12577
 - fire resistance of 2 seed sources, south Florida, 9540
 - performance of 2 varieties planted in south Florida, 9543

Pine—Continued

- slash—continued
 - seedling growth in Florida sandhills slowed by loss of topsoil, 14119
 - summer planting shows promise in Florida, 8118
- southern—
 - gluing amonum-salt-treated, with resorcinol-resin adhesives, 8063
 - properties, in relation to strength grading of dimension lumber, 2327
 - seed orchards, two new sucking insect pests of seed, 15283
 - vener cores, straight studs as byproduct, 8120
- sugar—
 - artificial ripening of seeds, 4856
 - branches, growth rate and survival probability of blister rust cankers, 14103
- western white—
 - diameter growth following precommercial thinning, 4826
 - market trends, 14089
 - mixed-pollen crosses, economical and reliable estimates of general combining ability for blister rust resistance, 9536
 - thinning and fertilizing increase growth, 6367
 - white, size and germination of seed collected at weekly intervals from 5 trees, 12580
- Pine Barrens :
 - hydrology and ecology, Pine Barrens, New Jersey (series), 6408
 - New Jersey, distribution of roots and rhizomes in different soil types, 6408
- Pine Bluff, Ark., population, special census, 10376
- Pine lands, see Timberlands.
- Pine lappet, see Lappet moths.
- Pine Mountain, primitive area, Ariz., mineral resources, 11166
- Pinellas County, Fla. :
 - engineer report—
 - departmental edition, 4735
 - document edition, 4477
 - land conveyance to—
 - law, 369
 - report, 900
- Pink bollworm, see Bollworms.
- Pins, Federal item identification guide, 17696
- Pinus banksiana, see Pine.
- Pinus contorta, see Pine.
- Pinus ponderosa, see Pine.
- Pinworms, life cycle, spread, etc., 1069
- Pioneer, see Spacecraft.
- Pioneer space probes, coding system, 14493
- Piotrowski, Maria A., relief, 780
- Pipe and pipe fittings :
 - bending jacketed piping, technique cuts time and cost, 8453
 - cast iron soil pipe from Poland, determination of injury to U.S. industry, 17252
 - Corrugated metal pipe culverts, structural design, criteria and recommended installation practices, 2843
 - Federal item identification guides for supply cataloging, supplements, 3288
 - Irrigation pipe trailer, farm building plan, 1707
 - jacketed cryogenic piping is stress relieved, 15553
 - liquid oxygen ducting cleaned by falling film method, 16947
 - pipe joints reinforced in place with fitted aluminum sleeves, 15541, 17954
 - pipe, metallic, Federal item identification guide, 10893
 - pipe welds, fixture facilitates helium leak testing, 12904
 - piping for ships of Navy, military standard, 2154
 - plain and rifled dredge discharge pipe, comparison tests, 7930

Pipe and pipe fittings—Continued
spherical joint delivers loads equally to
mating flange, 6823
tank filler pipes for automotive vehicles,
Federal standard, 4795

Pipe lines:
forced discontinuous oscillations of fluid,
6912
interstate natural gas, safety require-
ments, etc., hearings, 6093
natural gas—
maps, 1049, 12509
safety regulations, hearings, 16403
sales by producers to interstate pipeline
companies, 7973
statistics for interstate companies,
2247, 17760

oil—
transport statistics, 4929
transportation revenue and traffic, 3975
penalties for thefts from pipelines—
hearing, 2110
law, 377
report, 892
petroleum products, establishment, agree-
ment with—
France, 7169
Philippines, 2915
pipeline industry, compensation expendi-
tures and payroll hours, 11310
test sheet permits valve and valves actua-
tor to move as single unit in cryogenic
pipe line, 6698

Pipe threads, *see* Screw threads.
Pipelines, *see* Pipe lines.
Piper, Arthur M., potential effects of Project
Chariot on local water supplies, north-
western Alaska, 2369

Piropasmosis, equine, 1966, report, 1675
Piscane, V. L., stabilization system anal-
ysis and performance of GEOS-A gravity-
gradient satellite (Explorer XXIX), 17940
Piscataquis County, Maine, geology and
petrology of Greenville quadrangle, 16684
Pistols, registration in District of Columbia,
require, hearings, 10644

Pistons:
gas-dynamics calculation of installation
with light piston, USSR study, 4999
manufacture, for high-speed engines using
sintered aluminum powder, USSR study,
4969

Pitch:
harmful, in woodpulp, review of methods
for estimating, 11112
resin fraction from various low-tempera-
ture tar pitches, characterization, 6632

Pitch (aircraft):
pitch maneuver speed margins for super-
sonic transport configuration with vari-
able-sweep wing, 17000

Pitch (motion):
Gemini configurations, damping and sta-
bility in pitch and yaw, errata, 1474
pitching moments caused by tail of air-
craft model, equations for application
of wind-tunnel wall corrections, 2715
stall pitch-up, piloted simulation study of
operational aspects, 12967

Pitch (music), *see* Musical pitch.
Pitch control motors, launch escape system
of Apollo spacecraft program, qualification
evaluation, 15560

Pitch pine, *see* Pine.
Pitcher, Charles B.:
gas, characteristics and distribution, and
market for gas equipment in Western
Europe, 16102

market for residential heating equipment
in Federal Republic of Germany, 5953

Pitman, Norman J., relief, 331, 691

Pittard, E. B., comparison tests of plain and
rifled dredge discharge pipe, 7930

Pitts, Donald G., visual illusions and air-
craft accidents, 11958

Pittsburgh, Pa.:
aeroradioactivity survey and areal geology
of area, 1779

area wage survey, 11317
flood protection, Turtle Creek, channel im-
provement, hydraulic model investiga-
tion, 7932

Pividal, Rafael J. Nobo y, *see* Nobo y Pividal,
Rafael J.

Pixley National Wildlife Refuge, general in-
formation, 8031

PKU, *see* Phenylketonuria.

PL 480 newsletter, 3507

Placement, handicapped, summary of inspec-
tion findings, 10432

Plafker, George, geologic effects of Mar. 1964
earthquake and associated seismic sea
waves on Kodiak and nearby islands,
Alaska, 1121

Plague, USSR, Operation Ore, from memoirs
of L. A. Zil'ber, 6556

Plains States, *see* Great Plains.

Plane isotropic buildup factors for brems-
strahlung calculations, 15565

Plane stress, *see* Strains and stresses.

Planetariums, elementary-school teaching
resource, 5278

Planetary environment, *see* Environment.

Planetary gearing, *see* Gearing (planetary).

Planetary-interplanetary program, Venus
and Mars, advanced manned planetary mis-
sion programs, nominal natural environ-
ment, establish numerical values, 8436

Planetary topography, *see* Topography.

Planets:
atmospheres—

predictions of shock-layer radiation from
molecular band systems, 6890

structure, from on-board measurements
of pressure, etc., 9904

thermodynamic equilibria, 11426

Venus and Mars, investigation, 5276

heat transfer and temperatures distribu-
tion of conical porous membrane during
planetary entry, 11554

infrared radiation, outgoing, from plane-
tary atmosphere, theoretical computa-
tions, 14457

ionospheres, investigation, 12847

modifications in Brouwer's theory of gen-
eral perturbations in rectangular coordi-
nates, 2703

parachute opening, earth simulations of
planetary deployments, 16984

radar observation, USSR study, 1242

Voyager program, voyage to planets (re-
marks), 8514

Planing machines, pneumatic vibrating-blade
planer, test operation, 1411

Plankton:

Antarctic krill, Soviet fishery research,
15345

control of growth, organotin compounds
used, USSR study, 2460

vertical distribution, pump and reeled hose
system for studying, 14065

see also Zooplankton.

Planning:

and zoning in Appalachia, suggestions,
7854

community health planning, role of health
and welfare councils, 2832

farm irrigation systems, 14652

flood information for flood-plain planning,
9567

health services, extension of remarks, etc.,
7080

layout and arrangement for safety in in-
dustry, instructor outline, 8292

long-range forecasting and planning, Air
Force symposium, 17340

long-range mine planning, production-
scheduling model, etc., 9786

planning for the later years, 18207

quantitative methods for management,
11591

INDEX 1967

Planning (economics), *see* Economic policy—Housing.
Planning (Federal), *see* Economic policy.
Planning (programming), *see* Programming (planning).
Plans, *see* Architecture.
Plans for Progress:
 press releases, 3752
 program, 11298
Plant diseases, *see* Diseases of plants.
Plant Pest Control Division, programs, 11921
Plant pests, *see* Pests.
Planting:
 late, improves loblolly survival, 8119
 potatoes and sweet potatoes, dates, by seasons, in principal areas, 13211
see also Crops—Tree planting.
Plants:
 common, longleaf pine bluestem range, 2334
 foliage, production and sales, etc., 10108
 inventory, material received by New Crops Research Branch, 8810, 15828
 ornamental, marketing and other economic information, bibliography, 7885
 Pacific Island studies, new and noteworthy flowering plants from Fiji, 12997
 plant quarantine inspector—
 examination announcement, 12100
 plant pest control inspectors, examination announcement, 211
 plant-protecting agent industry and research, world status, with special reference to Hungarian condition, 16750
 plant regulatory officials of States, Canada, and Mexico, 5618
 problems of biological productivity of terrestrial plant communities, work of symposiums, USSR conference, 4968
 publications, price list, 5417
 quarantine import requirements—
 Australia, 8811, 13206, 17302
 Canada, 15829
 Fiji, 17303
 foreign countries, summaries, list, 4087
 Japan, 5617
 South Africa, 4089, 14734
 quarantine notices under plant quarantine act, P.P.C. series, 3667
 tissue, variations in respiration during gamma radiation, 8511
 underwater and floating-leaved plants of United States and Canada, field identification guide, 15267
 vascular—
 insect associational studies, bibliography, 8804
 of intermountain region, checklist, 14125
 woody plants and related nursery products, bibliography on marketing, 1708
see also Annuals (plants)—Diseases of plants—also names of plants.
Plants (industrial):
 dairy plants manufacturing ice cream and ice cream novelties, automation, layouts and operating criteria, 1702
 defense-oriented industries, shipments, 1965, current industrial reports, 8946, 13394
 equipment handbooks—
 air purification equipment, industrial fans, blowers, and vacuum cleaners, 4674
 automatic data processing systems, 7848
 chemical analysis and laboratory instruments, 4673
 chemical and pharmaceutical products manufacturing machinery, 7851
 industrial boilers, heat exchangers, and steam condensers, 977
 industrial marking and assembly machines, 7850
 materials feeders, 6141

Plants (industrial)—Continued
 equipment handbooks—continued
 miscellaneous maintenance and repair shop specialized equipment, 7852
 photocopying and photographic equipment, 4672
 pulp and paper industries and size reduction machinery, 4675
 rubber and plastics working machinery, 7849
 specialized ammunition and ordnance machinery, 9367
 expenditures for new plant and new equipment, annual survey of manufacturers, 7455
 expenditures for plant and equipment, 1963 census of manufacturers, 4276
 industrial location as factor in regional economic development, 13936
 Lugansk locomotive-building plant, book-keeping organization, USSR study, 1293
 manufacturing establishments, book value of fixed assets and rental payments for buildings and equipment, annual survey of manufacturers, 17418
 poultry and egg, operating under USDA inspection and grading programs, list, 2137, 16446
 relocation and core city worker, 16711
 smoked-fish plants, steps to effective sanitation, 9514, 16619
 storage maintenance of industrial plant equipment, quality assurance program, 13912
 tours for international visitors to U.S., 11888
 under USDA continuous inspection, processed fruits and vegetables, etc., list, 16447
see also types of industrial plants.
Plants, fossil, Tertiary, from Cook Inlet region, Alaska, 2365
Plasma:
 acceleration, 3-dimensional, through magnetic fields, etc., 5256
 accelerators, variable-length constant-velocity traveling magnetic wave, experimental investigation, 18034
 anisotropic, neutron production by fusion, 5347
 boundary interactions, 15512
 cold plasma, plasmatron principles and uses, USSR study, 16748
 collisionless, time-dependent structure of one-dimensional magnetic compression waves in oblique ambient magnetic field, 11508
 computer simulation of plasma and many-body problems, symposium, 16928
 concept for using laser beams to measure electron density in plasmas, 6807
 electron temperature from X-ray continuum radiation emitted from high temperature plasmas, 11681
 high frequency properties, 8510
 hollow cathode, penetration study, 2612
 homogeneous, weak turbulence, 8906
 hot, with cold gas, production of inverse population by mixing, USSR study, 17866
 hydrogen, superheated, using induction heating of cold plasma and DC plasma enhancement, production, 5166
 inhomogeneous lossy dielectric slab, input admittance of rectangular waveguide-fed aperture antenna, radiating into, 18028
 ionized, use to create laser, USSR study, 4998
 low energy, experiments, 17942
 low-pressure, radio frequency induction heating, 18035
 movable rf probe eliminates need for calibration in accelerators, 17973
 oscillations stimulated by pre-bunched electron beam, 12870

Plasma—Continued

physics—
and controlled nuclear fusion research,
translated Russian papers, 5756
methods of high-speed measurement,
4897
numerical experiments, 1791
potential and charge distributions, com-
puter programs calculate, 2668
reentry, about manned orbital spacecraft,
deduction of properties from radio signal
attenuation data, 14494
sheath, radiation of cylinder, 5176
spectroscopic temperature measurements,
2714
stability and Bohr-van Leeuwen theorem,
8495
tenuous, volume ion production c sts,
15577
theta-pinch facility, report of Ad Hoc
Panel on Scyllac, 13347
uniform and nonuniform, ion cyclotron
wave generation and electron inertia
effects, 12962
vacuum clamp switch for Pharos capacitor
bank, 9984
warm collisional, resonant frequencies of
immersed dielectric sphere, 12929
Plasma (blood), see Blood.
Plasma guns, heat output of accelerator,
measuring with fast-acting calorimeter,
12911
see also Coaxial plasma gun.
Plasma jets:
electrode, longer operating life, 8385
technology, NASA contributions to use in
chemical processing, 12867
Plasma Physics Laboratory, annual report,
7424, 13330
Plasmatoms, principles and uses, USSR
study, 16748
Platt, William T., land disturbances from
strip-mining in eastern Kentucky, 8077,
17801
PLASTECH notes, 2155-56, 4680, 12446,
17701
PLASTECH reports, 981, 2157, 7864, 17702
Plaster casts, knee, adjustable hinge per-
mits movement, 9829
Plasterers, examination announcement,
10415
Plastic sheets, see Sheet-plastic.
Plastic strain, see Strains and stresses.
Plastic surgery, see Surgery.
Plasticity, scientific bases, 1965, USSR re-
search, 2453
Plasticizers, production and sales, 17256
Plastics:
and related materials—
guide to test methods, 17701
military applications, 12446
borax dispersion in plastic, excellent fire-
retardant heat insulator, 8384
composites, industrial evaluation of radia-
tion, 5780
compositions, classification definitions,
8605
copper-acrylic enamel serves as lubricant
for cold drawing of refractory metals,
5140
directory of knowledgeable Government
personnel, 2157
discrete-element methods for plastic analy-
sis of structures, 17933
encapsulation of electronic parts, review,
7864
filament-winding, m-aminobenzyl amine
(MARA), syntheses, properties, and
uses, 9989
glass reinforced fabrication techniques for
aircraft structures, 4222
glossary of terms, consensus, 4680
infrared spectra, related polymeric ma-
terials (elastomers), 15636

Plastics—Continued

microvoids in glass-filament-wound struc-
tures, measurement, minimization, and
correlation with interlaminar shear
strength, 11677
military standardization handbook, 980
PLASTECH notes, 2155-56, 4680, 12446,
17701
PLASTECH reports, 981, 2157, 7864, 17702
plastics in Government, 4 papers presented
at 1966 annual conference, Society of
Plastics Industry, 2155
polystyrenesulfonate model membranes,
polymer structure and ionic transport,
9592
reinforced plastic laminates, list of publi-
cations, 8054
shipments of selected products, 1965, cur-
rent industrial reports, 7480
technical conference papers, index, bib-
liography, etc., 981, 17702
thermoplastic rubberlike material pro-
duced at low cost, 2623
thermosetting strength, thermal and chem-
ical stability improved, 14412
tubing, protects flexible copper hose, 6755
U.S. production and sales, preliminary re-
port, 3699
working machinery, industrial plant
equipment handbook, 7849
see also names of articles made from
plastics.
Plastics Technical Evaluation Center:
PLASTECH notes, 2155-56, 4680, 12446,
17701
PLASTECH reports, 981, 2157, 7864, 17702
Platas-Prohbas, Dario L., relief, 10711
Plate glass, see Glass.
Plateris, Alexander A., divorce statistics anal-
ysis, United States, 17172
Plates:
circular, bending while confining incom-
pressible liquid, 97
cracked specimens, displacement gage for
crack-extension measurements, design
and use, 1513
crackline-loaded edge-crack specimens,
stress intensity factors, 6869
duality between problems of stretching
and bending of plates, 5186
edge-stiffened rectangular, subjected to
loads and temperature gradients, plane-
stress analysis, 16895
fabricated from glass filaments and epoxy
resins, compressive behavior, 9895
flat—
chilled, experimental and analytical
study of transient solidification of
flowing warm liquid, 12935
with attached protuberances, heat-trans-
fer measurements in turbulent bound-
ary layer, 5232
with oblique jet impingement, pressure,
fluctuations, 14388
Fresnel diffraction plates are simple and
inexpensive, 16945
infinite, nonuniform radial loads applied
to boundary of circular hole, 17914
instrumented parallel plate system, ab-
solute viscosity measured, 8467
nonlinear problems, incremental proce-
dure for solution, 2727
rectangular—
maximum response to random excita-
tion, 16892
vibration with various boundary con-
ditions, effect of edge loadings, errata,
12919
square, dynamic characteristics by passive
analog simulation, 5168
stresses at tip of longitudinal crack in
plate strip, 14498
thin, flat, circular, effects of uniform and
variable loads, equations provide tabu-
lar information, 8399

INDEX 1967

Plates—Continued
see also names of metals, etc., of which plates are made.

Platforms:
work—
 supported by self-locking blades, 12906
 with adjustable, self-locking ladder, 9834

Plating:
 complex surfaces plated by thin-film deposition in one operation, 8447
 evaporant feed device facilitates flash vapor deposition process in vacuum, 16955
 ion plating on surfaces having various configurations, deposition of thin films, 1510
 pyrophosphate copper plating, steel test panel helps control additives, 17969
 thin plastic sheet eliminates need for expensive plating, 6336
see also Nickel—Silver plating.

Platinum:
 electrode—
 in high-purity closed system, potentiostatic current-potential measurements, 10011
 interaction of carbon dioxide with hydrogen chemisorbed, errata, 8586
 electrodeposition of thick coatings on refractory metals from aqueous electrolytes, 10861
 metals group, sliding friction, 15578
 metals, mineral industry survey, quarterly, 3689
 platinum-group metals, mineral industry surveys, annual, preliminary, 5122
 Plato LAC 12, lunar chart, 10225
 Platt National Park, general information, 6983
 Platte River and Valley, water supply outlook and snow surveys, 4045
 Platystomatidae, *see* Flies.
 Plays, *see* Drama.

Pleasanton Plant Materials Center:
 relocation—
 hearings, 16303
 law, 17539
 reports, 18669, 15128

Please don't eat the poison ivy, 13959

Plebuch, Raymond O., water resources of Pulaski and Saline Counties, Ark., 8181

Plotters:
 computer routine adds plotting capabilities to existing programs, 2643
 design, image sensor, simplifies transfer characteristics, 12915
 digital, automatic, subroutines GEORGE and DRASTC, simplify operation, 15485
 use in East German air defense system, 2437
 Y-Y, use of oscilloscope, 15539

Plotting boards and plotting, contour plotting, computer program utilizes FORTRAN IV subroutines, 16958

Plowshare program (civil, industrial, and scientific uses for nuclear explosives):
 reports, 1798-99, 4235-37, 5781-82, 5787, 7426, 10312, 10491, 13342, 15962, 17394-398

Plugs, expansion, replaces weld filler as seal in complex casting, 2632

Plumbbob Operation, *see* Operation Plumbbob (nuclear effects test).

Plumbers, safe work guide, 11305

Plumbers' supplies:
 plumbing fixtures, current industrial reports, 3170, 17433
 porcelain enameled formed steel plumbing fixtures, standard of trade, 6918, 17037

Plumbing, equipment, Federal item identification guides for supply cataloging, supplements, 3288

Plumbing fixtures, *see* Plumbers' supplies.

Plumes, *see* Jet plumes.

Plums, production, use, value, 1965-66, by States, 14695

Plutonium:
 ages of plutonium-beryllium neutrons in tungsten-water media, 1502
 concentration and isotopic composition in reactor fuel element solutions, 13333
 metallography, principles, 10298
 radiochemistry, 126
 used as nuclear fuel, determining price, USSR study, 15373

Plutonium isotopes, plutonium-238 in reactor fuel element solutions, spectrometric determination, 13333

Plymouth County, Mass., Taunton quadrangle, geology, 9560

Plywood:
 effect of panel thickness and noncombustible inserts on surface flammability, 8064
 Federal item identification guides for supply cataloging, supplements, 3288
 hardwood, current industrial reports, 5862, 15997
 manufactured in Michigan and Wisconsin, distribution methods and end-uses, 8074
 softwood—
 construction and industrial, standard of trade, 11586
 current industrial reports, 5873, 16003
 Plywood mills, closures, Michigan and Wisconsin, 2308

Pneumatic insulation suit for radioactivity protection, USSR, 14231

Pneumatic tube transportation, solids, proceedings, Institute of Gas Technology, Mines Bureau symposium, 2542

Pneumatic wrench retains or discharges nuts or bolts as desired, 6701

Pneumodensography, pediatrics application, 12748

Ponts, Rutherford M., nomination, hearing, 9312

Pocket data book, USA, 5890, 5986

Pocket-size manual tape reader device aids computer tape checking, 17972

Podall, H. E., permeability requirements of membranes for use in desalination by reverse osmosis, 15331

Podgwalte, John D., bacteria of living and dead larvae of *Forthetia dispar*, 8075

Podiatry, *see* Chiropody.

Podosomeum, *see* Muhlenbergia.

Poetry:
 anthology of poetry and verse, Indian Affairs Bureau, 4911
 recorded, checklist of archives in Library of Congress, 5089

Point, *see* name of point, except when occurring as first name of town, etc.

Point Conception, Calif., to Mexican Border, coastal warning facilities chart, 11904

Point Reyes National Seashore, land acquisition, clarify and increase authorization, law, 385

Point source detection by scintillation survey meter, 1787

Point-source detection system rejects spatially extended radiation sources, 6794

Polson Ivy, identification, precautions, eradication, 10164

Polson oak, identification, precautions, eradication, 10164

Polson sumac, identification, precautions, eradication, 10164

Poisoning, *see* Lead poisoning.

Poisonous plants, *see* names of toxic plants.

Poisons:
 acute hydrazine toxicity in mice, toxicologic studies, 4183
 and other substances harmful to health, Czechoslovakian study, 14265
 chemicals, properties and uses, USSR study, 12680
 control centers, directory, 17139
 magpie reduction in an urban roost, 16635

Poisons—Continued

National Clearinghouse for Poison Control Centers, bulletins, 3593
organophosphoric compounds, antidotes against intoxications, Rumanian study, 11271
organophosphorus compounds, intoxication by, clinical and therapeutic aspects, Polish study, 4935
toxicity—
airmen who apply insecticides from aircraft may suffer ill-defined effects, 17410
monomethylhydrazine on frog cornea, 10242
see also Sprays and spraying—also names of poisons.

Poland:

cast iron soil pipe, determination of injury to U.S. industry, 17252
claims of U.S. nationals against, determination, hearing, 732
diabetics treated at health resorts, 17863
joint Soviet-Polish scientific and technical meeting, USSR study, 9658
life described, 5001
mineral industry, minerals yearbook chapter, 2563
1,000th anniversary of founding, commemorative medals, law, 361
production growth, quantitative analysis, 6482
Pugwash conference report, 1234
public health organization problems, 15425
Soviet-Polish symposium on development of science, 15411
trade in cotton textiles, agreement, 11866

Polar bears, International Scientific Meeting, proceedings, 2280

Polar regions, *see* Arctic regions.

Polar Scientific Research Institute of Sea Fisheries and Oceanography, USSR, activities, 6551

Polarimeters, *see* Polariscopes.

Polaris (star), *see* Pole star.

Polariscopes:

digital polarimeter, duty-free entry for Mount Holyoke College, 13775, 14901
polarimeter provides transient response in nanosecond range, 8455

Polarization (electricity):
antennas for Gemini VHF-UHF polarization experiment D-14, 10009

Polarization (light):

fatigue zones in metals identified by polarized light photography, 9546
Polarography, new electrolyte may increase life of polarographic oxygen sensors, 6740
Polaroid film helps locate objects in inaccessible areas quickly, 6743

Pole star, ephemeris, 17902

Poland, Robert B., services offered by National Agricultural Library, 5282

Poles:

spiral grain, cause of pole twisting, 14129
twist and bending strength, effect of spiral grain, 14126
wood utility, performance study, 1951-63, 1597

Polhamus, Edward C., vortex lift of sharp-edge delta wings, 2726

Police:

and community relations, national survey, 13062

Capitol, employ additional personnel, report, 10584

District of Columbia—

canine corps, expand, report, 9127
examination announcements, 4407, 13440

Police Department Band, include members of Fire Department, etc., report, 7687

Police Department reorganization, Congress to review report of D.C. Crime Comm., final report, 6011

Police—Continued

District of Columbia—Continued

recruitment, retention, etc.—
hearings, 9152
report, 6011

report motor vehicle collisions to, report, 7689

retirement benefits, equalize for totally disabled, report, 9129

salaries, increase, law, 514

survivor benefits for widows of retired members, report, 10558

local agency employment data, hearings, 16325

officers, State or local, disabled or killed apprehending violators of Federal law, compensation—
hearings, 15168

reports, 14976, 15110

patterns of behavior and citizen transaction, career orientations, etc., 13060
police and community, dynamics of their relationship in changing society, President's Commission on Law Enforcement and Administration of Justice, 13061

task force report, President's Commission on Law Enforcement and Administration of Justice, 10034

Policemen, *see* Police.

Policy equation, *see* Equations.

Poliomyelitis, prophylaxis, USSR study, 1266

Polish American Congress, Inc., medals commemorating 1,000th anniversary of founding of Poland, law, 361

Polish Society of Amateur Astronomers, statute, 17863

Political Activity of Government Personnel Commission:

extend—
law, 13535

report, 9275, 12269

Political campaigns, *see* Elections.

Political corruption, prevention, Federal elections act of 1966, hearings, 739

Political prisoners and their relatives in Cuba, hearings, 957

Political rights of women, *see* Women.

Political science, publications, list, 2802

Politics:

American parade of politics, 10078

Communist China, translations, 3951

Eastern Europe, translations, 3991

food and fiber in Nation's politics, 17123
philosophical development of theories, USSR study, 5024

political organization of socialist society, USSR studies, 14269

rifts within Turkish left, 14243

South Viet-Nam, political development, 11823

Polk, Kenneth, nonmetropolitan delinquency, action program, 11906

Pollack, Gerald A., remarks, Feb. 16, 1967, 5964, 7585

Pollack, Herman, address, May 17, 1967, 14671

Pollack, Morris, labor law and practice in Israel, 16812

Pollen, mixed-pollen crosses for blister rust resistance, economical and reliable estimates, 9536

Pollen trap, 8-day volumetric sampler, description, etc., 2322

Pollution of air, *see* Air pollution.

Pollution of streams, *see* Water pollution.

Pollution of water, *see* Water pollution.

Polone, Dock J., soil survey of Rogers

County, Okla., 1609

Polychaeta:

Morro Bay, Calif., benthic survey, 6956

type-specimens described by Edith and

Cyril Berkeley, 5310

Polyesters, *see* Esters.

INDEX 1967

Polymers and polymerization :

- ablation polymers, determination of kinetic parameters, by thermogravimetric analysis, 8896
- actin polymer differing from F-form, USSR discovery, 12713
- arylenesiloxane copolymers, 9843
- char-forming phenolic polymer used for ablative composites, decomposition characteristics, 6862
- diluted polymer solutions, reduces drag in turbulent flow, 14582
- ferrocene polymers, annotated bibliography, 2156
- fibrous reinforcements for space application, 11418
- highly halogenated polymers, synthesis, 9855
- Japanese Association for Radiation Research on Polymers, annual report, 5758
- new heterochain polymers, USSR study, 12741
- new polymer systems for reverse osmosis membranes, research and development, 8213
- photodegradation of—
 - high polymers in solution, 5358, 10015
 - polymer films, surface effects, 18113
- polyaromatics converted into structural material by isostatic compression process, 12898
- polymeric structures, colloidal asbestos fibrils as reinforcements, 16914
- polypeptides and polymers related to collagen, USSR studies, 14270
- static electricity of polymers reduced by treatment with iodine, 14411
- structure and ionic transport of polystyrenesulfonate model membranes, 9592
- wear and friction of laminates in liquid nitrogen, etc., 2693
- see also* Polymethyl methacrylate.
- Polymethyl methacrylate, photolysis, effect of additives, 10015
- Polymorphism, distribution, taxonomy in Labidocera jollae group, etc., 8544
- Polynoidae, bathyal polynoids from central and northeastern Pacific, 6960
- Polynomials :
 - first-order, predictor for data compression, 8491
 - manipulator AP-168 program, 9858
- Polyoma virus, interaction between virus and cells of various animal tissues in culture, USSR study, 6543
- Polypeptides, *see* Peptides.
- Polyps, colon and rectum, 14772
- Polysiloxanes, *see* Siloxanes.
- Polystyrene, monodisperse latexes, method measures mean particle diameter, 8394
- Polytetrafluoroethylene :
 - teflon insulated wire, technique for stripping, 8471
 - teflon sheet permits valve and valve actuator to move as single unit in cryogenic pipe line, 6698
- TFE-fluorocarbon (polytetrafluoroethylene), resin skived tape, standard of trade, 5286
- Polyurethanes, *see* Urethanes.
- Polyzoa, *see* Victorella.
- Pomegranates, production, use, value, 1965-66, by States, 14695
- Ponderosa pine, *see* Pine.
- Ponds, freshwater, distribution of cobalt-60, zino-65, strontium-85, and cesium-137, 15681
- see also* Fish ponds.
- Pontius, Paul E., realistic uncertainties and mass measurement process, illustrated review, 15592
- Pontoons, Federal item identification guides for supply cataloging, supplements, 3293
- Pontryagin principle, *see* Principle of the maximum.
- Pony Creek, archeology, 15734

Pooling, *see* Production.

Poor :

- assets of poor and near poor, 7130
- estimates in 1965 and trends, 1959-65, 7131
- legal services in action, the poor seek justice, 12449
- Legal Services Program, advocates for the poor, 6161
- prices in poor neighborhoods, 14305
- rural, aspirations and expectations, guide, to research, 17710
- women's earnings in poor families, fact sheet, 7238
- Pope, Robert E., compensation expenditures and payroll hours, motor passenger transportation industries, 17893
- Popenoe, Peter, aeroradioactivity survey and areal geology, New York and New England, 1778
- Poppet valves, *see* Valves.
- Population :
 - aged, social security survey, 13120
 - census, 1790-1890, price list of microfilm copies of schedules, 1518
 - census, 1960—
 - final reports, 13402-403, 14835
 - migration between State economic areas, 13402
 - quality control of field enumeration, 17443
 - socioeconomic status, 14835
 - supplementary reports, 4301
 - census, 1970, plans, hearings, 13711
 - census publications, price list, 7056
 - characteristics of Los Angeles, south and east areas, errata, 1875
 - characteristics of selected neighborhoods in Cleveland, Ohio, 4351
 - county veteran population, Dec. 1966, estimates by States, 17283
 - crisis, hearings, 956, 2121, 4642, 6112
 - index, 16416
 - current population reports, 3171
 - consumer buying indicators, 1878, 5884, 14832, 16027
 - consumer income, series, 4355, 16026
 - population characteristics, series, 176, 1874, 4348-50, 5877-78, 7483-85, 10360, 16008-9
 - population estimates, series, 177-179, 1876-77, 4352-53, 5879-83, 7486-87, 10361-365, 12086, 14831, 16010-15
 - special censuses series, 4354, 7488-89, 8949-54, 10366-379, 13398, 18016-25
 - technical studies, 1875, 4351, 12085, 17438
- current population survey, manpower statistics, concepts and methods used, 12768
- current survey of United States, origin, methods, and evolution (paper), 5885
- data controls, Atlanta, case study in household sample surveys, Spanish edition, 5899
- dynamics, Health, Education, and Welfare Department, activities, report on family planning, 1136
- education of American population, 14833
- farm, 1966, United States, 12084
- farm, series Census ERS, 12084
- field experiences in estimating growth (paper), 1880
- food and people, what we can do (remarks), 1694
- growth and earth resources, 14238
- international reports, 12090
- large metropolitan areas, provisional estimates, 177, 16013
- measures to improve medical service, USSR studies, 6538
- metropolitan areas, marital and family characteristics, 10360
- mid-decade census, take in 1975, etc.—hearings, 10666
- reports, 13663, 13686

Population—Continued
mobility, 1874

Negro—
characteristics, 4348
current population reports, 176
estimates by age and sex, 10365
projections of number of households and families, 1967-85, estimates, 5882
prospects in United States (lecture), 4357
Puerto Rico and outlying areas, 1960-66, estimates, 5880
special censuses conducted by Census Bureau, summaries, 7488-89, 10379, 16018, 16023
standard metropolitan statistical areas, 17438

States—
estimates, 178, 4352
households, estimates, 7486
1970-85, illustrative projections, 5883
1970-85, revised projections, 16014
tomorrow's population as seen today (paper), 1889

United States—
by metropolitan and nonmetropolitan residence, 7484
estimates, 179, 1876-77, 4353, 5879, 7487, 10361-362, 10364, 16010-12, 16015
estimates and components of change, 12086
projections by age, sex, and color to 1990, with extensions to 2015, estimates, 5881
projections for OASDHI cost estimates, 8686
recent projections, comparison, 11792
see also Rural population.

Population Growth, Advisory Council on Programs Relating to, *see* Advisory Council on Programs Relating to Population Growth.

Population Problems Office, Health, Education, and Welfare Dept.:
create, hearings, 956, 2121, 4642, 6112
index, 16416

Population Problems Office, State Dept.:
create, hearings, 956, 2121, 4642, 6112
index, 16416

Pore, N. A., FORTRAN program for calculation of hourly values of astronomical tide, etc., 9428

Pork:
fresh, purchase specifications, institutional, approved by USDA, 17680
good choice for thrifty family, food value, selection, recipes, 9344
price spreads, 4126
slaughtering, cutting, and processing on farm, 8829

Pornography and Obscenity Commission, *see* Obscenity and Pornography Commission.

Porosity:
core samples from wells in Appalachian oilfields, 11353
formation in aluminum alloy welds, effect of welding position, 12903
sediment meter, feasibility study, 10303

Porous materials:
mass transfer in porous media, 8211
status of porous ionizers for contact ionization of cesium, 11540

Port Arthur, Tex., area wage survey, 14294

Portable calf pens, 5659

Portage County, Ohio, geology and groundwater resources, 11172

Porter, Bernard, reaction rate of solid yttrium metal with molten lithium fluoride, 15474

Porter, Horace G., cotton in Australia, 2286

Portfolio of photographs, science teaching aid, 17158

Porthetria dispar, *see* Gypsy moths.

Portland, Maine, area wage survey, 5070

Portland, Oreg., area wage survey, 15442

Portraits, *see* names, etc., of subjects sitting for portraits.

Portraits in community health (series), 5456, 13089

Ports:

code classification used in compiling U.S. foreign trade statistics, schedule D, 4359, 8936
distances between U.S. ports, 17465
export corn meal port bulletin, 3248
export wheat flour port bulletin, 3253
port series, 4736, 9421, 16525
situation in Vietnam, followup investigation, report, 14998
see also names of ports, or places where located.

Portsmouth, Va., area wage survey, 16816

Portugal:

cotton textiles, trade, agreement, 1639
economy, basic data, 4443
mineral industry, minerals yearbook chapter, 11365
trade in cotton textiles, agreements, 8739, 15766
west coast, sailing directions, change, 7001, 17071

Portuguese East Africa:

labor conditions, 1384
Mozambique—

background notes, 18223
foreign trade regulations, 4437
mineral industry, minerals yearbook chapter, 9758

Portuguese Guinea, *see* Portuguese West Africa.

Portuguese language, spoken Brazilian, basic course, 2884

Portuguese West Africa:

Angola—
background notes, 17212
foreign trade regulations, 7574
labor conditions, 1385
mineral industry, minerals yearbook chapter, 9758

Guinea—
labor conditions, 5076
mineral industry, minerals yearbook chapter, 9758

Portulids:

portulid crabs from—
International Indian Ocean expedition in Smithsonian collections, 12998
Pacific and Indian Oceans in collections of Smithsonian Institution, 8540

Posen, Annette, meteoric trajectories and processes, including examination of incidence by reduction of data points, etc., 15510

Posfay, Virgil, relief, 16170

Position classification, *see* Job analysis.

Position-classification standards, 3692
Positive displacement cylinder measures corrosive liquid volume, 6756

Possessions of United States, *see* Outlying possessions.

Post, Austin, effects of Mar. 1964 Alaska earthquake on glaciers, 11178

Post, Edwin V., geology of Cascade Springs quadrangle, Fall River County, S. Dak., 14168

Post Office and Civil Service Committee, House:

activities, summary, 4557
calendar, 3482
committee prints, 4554, 4556-57, 10675, 15046-47, 16358, 17610
hearings, 747-749, 4553, 9165-67, 10666-674, 12308-310, 13711-712, 16339, 17607-609

Investigations and studies—

authorization, report, 6016
expenses, report, 7722
reports, 4505, 6232, 9133, 10562, 10580-581, 10613, 10619, 13662-663, 13637, 16232
rules, 89th Congress, 4555

INDEX 1967

Post Office and Civil Service Committee, Senate:
 calendar, 3500
 committee prints, 4654-55, 13880
 hearings, 6124, 7824, 9329, 10870, 12424-425, 13881, 16429-432, 17671-672
 investigations and studies—
 authorization and continuation, report, 4592
 postal service and civil service, authorization, report 6072
 legislative history and report of activities, 59th Congress, 4655
 reports, 915, 4592, 10745-746, 13727, 13806-807, 16376
 Post Office Department:
 annual report—
 departmental edition, 18136
 document edition, 17567
 appropriations, 1968—
 hearing, 6026, 10806
 law, 13529
 reports, 9097, 10791, 13658
 Assistant Postmaster General for Bureau of Facilities, nomination of John L. O'Mara, hearing, 13881
 challenge to industry, 10028
 cost ascertainment report, 8613
 facilities handbook series, 13053
 gasoline outlets at postal installations, potential savings through establishment, GAO report, 6378
 is looking for advice, advisory boards, etc., rosters, 17117
 leasing property by Postmaster General, extend authority—
 hearings, 7827, 9165
 law, 10484
 reports, 10562, 10726
 mailing list brokers, require registration, hearing, 10667
 manpower costs of railway post offices, potential savings available, GAO report, 4377
 methods handbook M series, 17116
 office space, administrative, provided in major postal facilities, policies and procedures, GAO review, 4880
 personnel promotion system, hearing, 10669
 planning for tomorrow's postal service requirements, etc., 8614
 planning, programming, and budgeting system, description, 5389
 policies and practices for rebuilding used motor vehicle tires, GAO review, 14162
 postal manual, 3694
 posters, commemorative stamp, 1556, 1558, 3106, 5386-87, 7039-41, 8611-12, 10024-26, 11692-694, 13050-52, 14606-607, 15644-648, 17112-114, 18187-139
 potential savings through changes in legislation affecting compensation of rural carriers and consolidation of rural routes, GAO report, 4874
 press releases—
 general, 3753
 philatelic, 3753
 public information service PI series, 1559, 2791, 13056, 17119
 publications, list, 1563
 report, 1966—
 departmental edition, 1557
 document edition, 528
 financial supplement—
 departmental edition, 11695
 document edition, 10499
 report on postal rates, 9076
 research & engineering, rewarding career, 7042
 suppliers and buyers of mailing lists, to furnish information with respect to their identity and transactions involving sale or exchange, hearing, 10687

Post offices:
 acquiring postal quarters, facilities handbook, 13053
 civil, at military installations, adequacy, 16338
 dedicating your new facility, guideline, 13056
 directory, 17115
 with ZIP code numbers, 14609
 1st, 2d, and 3d class, postmaster positions, information, 10425
 long-term leases, extend authority—
 hearings, 7827, 9165
 report, 10726
 manual, 3694
 names, abbreviations for use with ZIP code, 7043
 railway, potential savings available in manpower costs, GAO report, 6377
 revenues and classes, 5390
see also Zip code.
 Postage:
 2d and 3d class postal rates for volunteer fire, ambulance, and rescue companies, extend, report, 694
 Post Office Dept., report on postal rates, 9076
 postal rates, investigation, authorization and continuation, report, 4592
 postal revenue act of 1967, rate increases—
 hearings, 12309, 17672
 hearings, summary, 15047
 recommendations of Postmaster General, 10675
 rate increases, message from the President, 9069
 3d-class rates, bills and statements of account prepared by electronic data processing equipment, classify as 1st-class mail, amend U.S. Code, hearings, 12424
 Postage stamps:
 commemorative—
 1½-cent Albert Gallatin regular (poster), 5386
 3-cent Francis Parkman regular (poster), 15644
 5-cent—
 Canada centennial (poster), 10024
 Canada centennial address at issuance, 11697
 Christmas (poster), 17112
 Davy Crockett (poster), 14606
 Erie Canal (poster), 11892
 Finland Independence (poster), 15645
 Henry David Thoreau (poster), 11693
 Henry David Thoreau stamp ceremony (remarks), 14611
 Mississippi statehood (poster), 18137
 National Grange (poster), 8611
 Nebraska statehood (poster), 13050
 search for peace (poster), 11694
 servicemen-savings bonds, 1st day ceremony (address), 1556
 Thomas Eakins American painting (poster), 17113
 twin space (poster), 17114
 urban planning (poster), 15646
 urban planning, ceremony (address), 17110
 Voice of America (poster), 13051
 Washington (poster), 18138
 8-cent Alaska purchase air mail (poster), 7040
 8-cent international postal card (poster), 18139
 10-cent Andrew Jackson regular (poster), 7041
 13-cent John F. Kennedy—
 aerogramme (poster), 10025
 prominent American stamp, dedication (address), 11690
 regular (poster), 10026
 20-cent Audubon air mail (poster), 8612

Postage stamps—Continued

commemorative—continued
 20-cent George C. Marshall (poster), 15647
 20-cent George C. Marshall ceremony (address), 16135
 25-cent Frederick Douglass regular (poster), 5387
 \$1 Eugene O'Neill (poster), 15648
 \$5.00 John Bassett Moore regular (poster), 1558
 poster, 3106
 standards, 2792
 philatelic releases, 3753
 Postal bulletin, *see* Postal service.

Postal cards:

commemorative—
 6-cent Boy Scout world jamboree (poster), 13052
 6-cent Virgin Islands air mail (poster), 7039
 8-cent international postal card (poster), 18139
 13-cent international air mail (poster), 14607

Postal employees, *see* Postal service.

Postal inspectors, general information, 2791
 Postal life, magazine for postal employees, 13055

Postal rates, *see* Postage.

Postal Savings System, report on operations, 4490

Postal service:

Armed Forces, mailing privileges provide better overseas service—
 hearings, 10670
 law, 438
 report, 10613

Armed Forces, Vietnam and Thailand, on-site inspection, report 4505
 better service with better tools, facilities, etc. (address), 13049

challenge to industry, 10028

code of Federal regulations, 11044

contract mail haulers—

fair labor standards act and service tract act, application, 7227

Federal wage-hour law application, 7226

efficient management (address), 1555
 employee benefits and postal services are greatly improved (address), 15643
 employees—

field service, ratio of career substitutes, reduce, hearings, 17607
 salaries, adjust, hearings, 12310, 17671
 salary and retirement annuity increases, p. 266, 1945-66, 4556

field service, reclassify certain positions, hearings, 12308

investigations—

authorization and continuation, report, 4592

authorization, report, 6072

laws, 11696

laws, changes, 17118

objectives (address), 7038

postal bulletin, 3693

postal inspection service protects against mail fraud, 17119

postal inspector, general information, 2791

postal life, magazine for postal employees, 13055

postal zone charts, 2790

promotion system of Post Office Department, hearing, 10669

publications, price list, 10038

qualification standards for field service, 3791

registered mail, indemnity for delayed delivery, hearing, 9166

revolvers, use and care, methods handbook, 17116

rural routes, consolidation, potential savings, GAO report, 4874

Postal service—Continued

special services performances, cost ascertainment report, 8613

State postal maps, 5391-5402, 11698, 15649-662

structure of postal system needs revising (address), 11691

technology of modernization, hearings, 13712

transportation of mail by vessels, rates of compensation—

law, 17554

reports, 10581, 16376

uniform or badge of letter-carrier service, permit use in theatrical, television or motion picture production, report, 14975

use of mails to incite riots, penalties, amend U.S. code—

hearings, 15165, 16419

reports, 12282, 13664

ZIP code, last word in mail addressing, 1559

see also Air mail—Franking privilege—

International postal service—Mail matter.

Postal zone charts, 2790

Postdoctoral fellowships in education research, 1012

Posters:

Defense Supply Agency, let's face it, security is up to you, 10601

DSA poster series, 4681, 7865, 10901, 13927, 15200

Food and Drug Administration, 16639

Forest Service, 16648

Post Office Department, commemorative stamps, 1558, 3106, 5386-87, 7039-41, 8611-12, 10024-26, 11692-694, 13050-52, 14606-607, 15644-648, 17112-114, 18137-139

sold by Superintendent of Documents, price list, 7058

uniforms of United States Navy, 1776-1898, 7008

use medicated feeds carefully and wisely, FDA poster, 16639

Postmaster General, *see* Post Office Department.

Postmasters, positions, 1st, 2d, and 3d class post offices, information, 10425

Posts, wooden, machine-driving, way to reduce highway guardrail costs, 11138

Potash, fertilizer supply, 8819

Potassium:

biaxially stressed D-43 alloy with reducing potassium, compatibility, 11422

condensing radiator, multitude, centrally finned, experimental steady-state performance, 18052

high-performance once-through boiling in single tubes at saturation temperatures of 1500° to 1750° F, 15504

high temperature, vaporization in forced convection at saturation temperatures of 1800° to 2100° F, 14391

human serum, estimation of change during simulated altitude and aerospace flights, 7341

mass transfer in stainless steel-Cb-12r-potassium system, and effect of stabilization of carbon and nitrogen in stainless steel, 12864

microlocalization in myofibrils, USSR studies with sodium tetraphenylborate and interference microscope, 14217

nonwetting, condensing mercury flow in horizontal cooled tubes, heat-transfer, experimental investigation, 11541

steady-state performance of NaK-cooled potassium condenser, 12937

thermal and hydraulic performance during condensation inside single tubes, 15506

thermodynamic properties to 2100° K., 16999

INDEX 1967

Potassium—Continued
thermophysical properties, summary, errata, 12920
transport mutant of *Escherichia coli* phosphorus metabolism abnormalities, 10235
vapors, expansion and flow characteristics, 2717
Potassium-aluminum silicates, see Silicates.
Potassium isotopes, potassium-40, body composition of military population, Ft. Carson, 1963, report, 120
Potassium permanganate, thermal decomposition, changes in kinetic properties as result of irradiation, 11570
Potatoes:
acreage, yield, etc., by States and seasonal groups, 13251, 14698
demand and price analysis, 13252
explosion puffed dehydrated, estimated cost of commercial production using shortened cycle, 8808
frozen french fried, U.S. standards for grades, 6134
futures:
commitments of traders, 3111
trading and open contracts, 3367
in popular ways (recipes), 15851
Irish, utilization of 1966 crop with comparisons, 17250
machine for application of dust to cut seed potatoes, 7241
national potato labeling act, hearing, 17649
National Potato Utilization Conference, report, 11919
planting, harvesting, marketing dates, by seasons, in principal areas, 13211
production and harvesting, evaluation of cost factors, 15873
special Idaho potato survey, 5558
spring crop, bulk handling from harvester to packing line, methods and costs, 35
spring, 1967 acreage-marketing guides, 2134
sprout prevention, 17301
storage, 20,000 cwt. arched roof, 13230
summer and fall, acreage marketing guides, 10872
total stocks, monthly report, 3942
winter, acreage marketing guides, 962, 16441
see also Sweetpotatoes.
Potential, generalized, for inelastic scattering, 11543
Potentiostatic current-potential measurements on platinum electrode in high-purity closed system, 10011
Potomac Planning Task Force, report, 16717
Potomac River and Valley:
interceptor sewer, increase Federal contribution to cost—
hearings, 13703, 13858
law, 17538
reports, 14995, 15101
report on its imperiled future and guide for orderly development, 16717
reverse osmosis test, 6441
Potosi quadrangle, Wis. and Iowa, geology, 6388
Potter, Andrew E.:
electrochemical reduction of chlorine on carbon in molten lithium chloride-potassium chloride, 17003
mechanism of cadmium sulfide film cell, 6889
Potter, R. C., acoustic prediction methods for rocket engines, etc., 1422
Potters, workers, displaced, case study of adjustment to layoff, 1360
Potting compounds, see Sealing compounds.
Poultry:
automatic feeding equipment, 8830
broiler house pole construction, building plan, 40
byproducts, salmonella control, sanitation guidelines for processors, 11922
commercial broiler production, 5623

Poultry—Continued
estimates, background on revisions, 8752
foreign agriculture circulars, 3345
good choice for thrifty family, recipes, 9349
hatchery production, 3390
home freezing, 4107
houses and equipment for laying hens, for loose housing, 10183
inspection regulations, hearing, 710
inspectors' handbook, 13889
inventory, 5682, 7198
market statistics, 1966, annual summary, 7299
national improvement plan—
hatcheries and dealers participating, 5615, 10150
provisions, 14752
record of performance test summary, 7243
packaging and price marking in retail food stores, systems and equipment, 7276
plants operating under inspection and grading programs, lists, 2137, 16446
poultry and egg situation (periodical), 3695
processing plants, chemical compounds authorized for use under USDA inspection programs, lists, 10878, 16445
publications, price list, 2800
slaughtered under Federal inspection, monthly report, 3696
USDA grades, how to buy, 5671
used in canning and processed foods, monthly report, 3696
see also Avian Leukosis—Chickens—Food for poultry—Turkeys.
Poverty:
American families in poverty, fact sheet, 5600
Communist China, anti-economism campaign idealizes poverty, USSR historian claims, 6582
community development district act of 1966, rural poverty program, reports, 622, 10748
economic opportunity act—
amendments of 1966—
law, 498
narrative summary, 6164, 9382
text as amended, 6124, 7874
from world of poverty to life of hope, year in Neighborhood Youth Corps, 6590
investment in poor people, 5044
Legal Services Program, advocates for the poor, 6161
opportunity loan program, battle to combat rural poverty, 5674
poor in 1965 and trends, 1959-65, 7131
rural—
and economic development (statement), 6158
existence and elimination (statement), 7296
Farmers Home Administration reduces, 5670
hearings before National Advisory Commission on Rural Poverty, 15668, 17126-127
reduction through public and private effort (remarks), 6204
role of education in alleviating, 10917
social security benefits and poverty, status of low-income beneficiaries or aged persons, 7132
study, authorization and expenses, report, 6079
study, expenses, report, 15136
study, hearings, 10860
urban and rural, recommendations, message from the President, 7612
war on poverty—
advisory councils, monthly newsletter, 2990
communities in action (periodical), 3124
communities in action, information service, 3125

Poverty—Continued

war on poverty—continued
community action program, public affairs handbook, 13940
conference proceedings, 16481
examination, hearings, 12420, 13878, 15171, 16427, 17665
labor's role, seminar, 11299
legal services program, monthly account, 3466
news summary, 3632
project moneywise, role of credit unions, 9451
rural opportunities (periodical), 3842
the watershed, a new look at war on poverty, 10915
voluntary help wanted for projects, 9386
what VISTA volunteers are doing, 10909
women in poverty, jobs and need for jobs, 14727
work experience and training program, 12482
workers questions and answers on race relations and civil rights, guide, 10913
Povinelli, Louis A., transverse-mode solid-propellant combustion instability in vortex burner, experimental investigation, 1511
POW, *see* Prisoners of war.
Powder metallurgy, *see* Metallurgy.
Powders:
dry chemical fire-extinguishing, determining specific surface, permeability and elutriation methods, 11678
experiments to investigate particulate materials in reduced gravity fields, 18000
standard X-ray diffraction patterns, 15591
submicron, blending methods for dispersion alloys, comparison, 6880
Powell, Adam C.:
right to be sworn in as Representative from New York State in 90th Congress—
hearings, 6038
investigation, expenses, report, 6010
report, 7604
Powell, Howard E., magnetic susceptibility of 19 nickel- and cobalt-bearing minerals, 17911
Powell, Jules V., bibliography on marketing woody plants and related nursery products, 1708
Powell, R. W., thermal conductivity of selected materials, 1523
Powell, Y. Marjorie Flores, *see* Flores, Y. Marjorie.
Power:
clutches and power-stop control, classification definitions, 18132
conservation, code of Federal regulations, 11035
Federal power act—
amend. hearings, 16401
text, 17759
fluid, Navy training course, 5338
harmonic generation, use of millimeter wave diode, 11483
machinery, USSR industrial development, translations, 4018
motive, for class 1 railroads, 3587
Northeast power failure, Nov. 9-10, 1965, hearings, addendum, 2053
power engineering trends in Latvian SSR, 1235
power-spectral-density computer program, 11481
radioisotopes as power sources in Western Europe, 15416
required to circulate gas-solids suspensions, 15483
satellite systems configurations for maximum utilization, study and analysis, 16918

Power—Continued

sources and structures, surface-to-air missile series, engineering design handbook, 15928
space systems—
electrical component technology, design studies, 15964-965, 17399
solar-cell performance using spectral dispersion, 15579, 16992
spectral shapes, fatigue life under random loading, 17013
see also Atomic energy—Electricity.
Power and responsibility, 5530
Power boilers, *see* Boilers.
Power equipment in mineral industries, 7471
Power plants:
classification definitions, 18121
India, Soviet studies, 6525
space power systems advanced technology conference, 1440
space, Rankine-cycle 3-loop steady-state and dynamic operating characteristics, 2603
see also Electric power plants.
Power reactors, *see* Reactors (atomic).
Power resources:
energy R & D and national progress, 2851
findings and conclusions, 10075
Power sprayers, *see* Sprayers.
Power tools, power arc welder touch-started with consumable electrode, 6803
Power transmission:
eccentric drive mechanism is adjustable during operation, 17984
equipment, mechanical, Federal item identification guides for supply cataloging, supplements, 3285
underground, report, 12513
Power trucks, safe practices, 9722
Power Use Conference, Portland, Oreg., proceedings, 10323
Powers, R. W., geology of Arabian peninsula, sedimentary geology of Saudi Arabia, 1124
PPBS [Planning, Programming, and Budgeting Systems] Training Center, *see* Financial Management and PPBS Training Center, CSC.
Prabhu, Albert V. M. Ferris, *see* Ferris-Prabhu, Albert V. M.
Practical nurses, *see* Nurses and nursing.
Practical nursing, *see* Nurses and nursing.
Prague, Czechoslovakia, East of the Elbe, study mission report, 6104
Pranatis, A. L., bonding of oxides of high temperature alloys, 10016
Praseodymium, metals, electrowinning from their oxides, 11384
Pratt, Walden P., geology of Hurley West quadrangle, Grant County, N. Mex., 12601
Pravda (periodical):
editorials, translations, 3948
political reviewer's comments on 1966, USSR study, 5006
Preamplifiers, *see* Amplifiers.
Pre-Cambrian period:
petrology and structure of Precambrian rocks, Central City quadrangle, Colo., 12611
rocks of Groom district, Nev., 14169
younger Pre-Cambrian geology in southern Arizona, 16696
Precipitation:
calcium sulfate investigation, final report, 14198
five continents, forecasts, comparisons, etc., 11790
hourly data, by States, etc., 3401
Northwest States, probable maximum, 5594
Pacific Northwest, monthly, 3669
Tennessee River basin, monthly, 3698
United States, long-range forecast, supplement, 11791
see also Rain.

INDEX 1967

Precipitation (chemistry):
 kinetics of excess solute precipitation in liquid sodium solutions, 5359
 Precision CW laser automatic tracking system investigated, 6791
 Precision instruments:
 East European industries, translations, 3955
 USSR industrial development, translations, 4019, 4022
 Prediction (psychology):
 Air Force Academy cadets, class of 1967, 1st year achievement, 17343
 Air Force weather forecaster proficiency, test correlates, 3863
 airman performance prediction from trait ratings, 11952
 automobile accidents among Air Force personnel, 17344
 reenlistment at end of 1st term of Army service, 118
 success in instructional programmer school, 17345
 Prediction of absolute entropies from gas chromatographic retention data, 18111
 Predmore, R. E., damping behavior of DeHavilland stem booms, 11539
 Prefabricated buildings, *see* Buildings.
 Pregnancy, childbearing and diabetes mellitus, 1960-82, United States, 5469
 Pre-Gondola Project, *see* Project Pre-Gondola (field cratering experiment).
 Premium pay, *see* Hours of labor.
 Prepackaging, *see* Packaging.
 Preparedness, *see* National defense.
 Preregulator feedback circuit utilizes light actuated switch, 2663
 Preschool children, *see* Children.
 Pre-Schoolnet Project, *see* Project Pre-Schoolnet (field cratering experiment).
 Prescriptions:
 drug prescription programs, digest, 8623
 medicines and other pharmaceutical preparations which may be dispensed by pharmacies without physician's prescription, Czechoslovakian list, 12673
 Present value of estimated lifetime earnings, 13401
 Preservation of biological specimens, *see* Biology.
 Preservation of food, *see* Food.
 Preservation of materials, classification definitions, 18119
 Preservatives, *see* Wood preservatives.
 Preserves, how to make at home, 5629
 President of United States:
 code of Federal regulations, 9459, 14033, 16586
 economic report—
 departmental edition, 5406
 document edition, 4486
 extending date for transmission, law, 9031
 hearings, 9046
 report, 7785
 election campaign fund act—
 guidelines—
 law, 12168
 legislative history, 13719
 report, 10614
 law, 513
 law, summary, 9177
 legislative history, 7762
 report, 702
 Senate amendments, summary, 4567
 elections, amend equal time provisions of communications act, hearings, 16400
 funds appropriated to the President, 1968, budget amendment, 10519
 inaugural ceremonies act, amend, report, 7686
 messages, *see*, in main alphabet, subject of message.
 papers—
 announcement and order form, 8622
 index series, 6623

President of United States—Continued
 papers—continued
 Jackson, Andrew, 8623
 Johnson, Lyndon B., 2256, 4780
 Truman, Harry S., 1059
 Presidential documents, weekly compilation, 4054
 press releases, 3754
 remarks, etc.—
 Sept. 27, 1966, 2784
 Oct. 7, 1966, 1626
 Oct. 17-Nov. 2, 1966, 2880
 Sept. 29, 1967, 18228
 state of the Union message, 12195
 veto messages, employees' life insurance coverage, 4467, 16155
 Presidential Election Campaign Fund Advisory Board:
 establish—
 law, 513
 law, summary, 9177
 legislative history, 7762
 report, 702
 Senate amendments, summary, 4567
 Presidential scholars, *see* Scholars.
 Presidential Task Force on Career Advancement:
 report, 7046
 annex, 10030
 President's Commission on Budget Concepts, report, 18146
 President's Commission on Crime in District of Columbia:
 appropriations, 1967, law, 501
 report, 2794
 appendix, 2795
 President's Commission on Law Enforcement and Administration of Justice:
 appropriations, 1967, law, 501
 challenge of crime in free society, report, 7044
 field surveys, 13058-62
 recommendations in report, message from the President, 5998
 symposium on science & criminal justice, 11699
 task force reports—
 corrections, 10031
 courts, 10032
 crime and its impact, assessment, 13065
 drunkenness, 13066
 juvenile delinquency and youth crime, 11703
 narcotics and drug abuse, 13067
 organized crimes, 10033
 police, 10034
 science and technology, 11704
 President's Commission on Patent System:
 reports, 2796, 6053
 appraisal (address), 7031
 print as Senate document, report, 4598
 President's Commission on Postal Organization:
 appropriations, 1968—
 amendments, 13723
 hearings, 15147
 report, 15131
 President's Commission on Status of Women, report, excerpts on counseling and guidance, 7236
 President's Committee on Consumer Interests, activities 1964-68, summary, 10029
 President's Committee on Employment of the Handicapped:
 action, 1967-68 program guide, 17121
 awards and recognition program, 1355
 awards program at a glance, 1356
 membership directory, 2491
 national ability counts contest for 11th and 12th grade students, announcement, 15667
 performance, story of the handicapped, 3680
 press releases, 3753
 this is President's Committee on Employment of the Handicapped, 18147

President's Committee on Mental Retardation:

1st meeting, sets goals for future, 7047
Members, biographies, 5407
messages from, 1560, 5407, 7047-48
PCMR progress, 2793

report on Nation's progress and great needs in campaign to combat mental retardation, 15665

President's Council on Physical Fitness:

demonstration center schools, projects, 18145
new youth fitness test norms and presidential award, 5408

newsletter, 3634
youth physical fitness, suggested elements of school-centered program, 8617

President's Council on Recreation and Natural Beauty:

general information, 8616
purposes and missions (remarks), 4914

President's reorganization plans, *see* Government reorganization plans.

President's Science Advisory Committee:

computers in higher education, report, 8616

Panel on Educational Innovation, report, 15663

space program in post-Apollo period, 7050
world food problem, reports, 11706-707

President's Youth Opportunity Campaign, 1966, HOPE, highlights of personal experiences in Department of Agriculture, 8833

Pressman, Mario, relief, 550

Presplitting, controlled blasting technique for rock cuts, 5476

Press:

Albania, information report, 3701
censorship, field manual, 13293

Communist China, Red Guard press information, 14249

Iran, information report, 3702

Latin American, abbreviations used, glossary, 12721

Soviet materials on arms control and disarmament (periodical), 8888

Press releases, *see* names of offices issuing releases.

Pressmen, cylinder pressman, examination announcement, 5928

Pressure receptors, aortic baroreceptors, 11278

Pressure:

behavioral changes in rats at ground level following gestation and growth in 100 percent oxygen at reduced pressures, 15599

characteristics, nonwetting - condensing flow of mercury in sodium-potassium cooled, tapered tube, 1498

conical probe, performance at Mach numbers of 3.0, 4.5, and 6.0, 5230

distribution curves applicable to pneumatic tires, experimental study, 11401

distributions—

effect of roughness on heat transfer to hemisphere cylinders, 8492

for freon-113 condensing in downward flow in vertical tube, 11510

oscillating panels in low supersonic flow turbulent boundary layer, 6718

drop—

and heat transfer for water boiling in single-tube heat exchanger, 14463

two-phase flow through abrupt expansions and contractions, 7431

effect of sound wave on cryogenic fluid, 12940

engine cylinder, variation, indicator system provides complete data, 5200

external, sandwich and ring-stiffened 120° conical shells, buckling, effect of edge constraint, 11417

fixture tests bellows reliability through repetitive pressure/temperature cycling, 11448

Pressure—Continued

flight-measured chordwise distributions of helicopter rotor blade as compared with 2-dimensional airfoil characteristics, 11502

fluctuations on flat plate with oblique jet impingement, 14388

gas-reservoir properties determined from pressure buildup data, 15479

hydrostatic, large-diameter ring-stiffened cylinder subjected to, test, 1479

long-term lower body negative pressure, influence on circulatory function of man during prolonged bed rest, 1784

low—

application of orbitron ionization gage, study, 16909

environments, indirect calorimetry, 11957

measurement, bibliography and index, supplement, 12984

steam-water flow in heated vertical channel, 7430

lower body negative pressure—

and orthostasis, forearm vascular responses, 4175

effects on physiologic changes due to bed rest, 7346

measured static pressures in low-density arc-heated wind tunnel, effect of orifice size and heat-transfer rate, 6876

measurements on board entry vehicle, use in determining structure of atmosphere, 9904

miniature telemetry system accurately measures, 6786

oxygen environment at 210 mm Hg. absolute, effects on rats, 1740

pressure levels and pulsation frequencies can be varied on high pressure/frequency testing device, 17971

pressures and forces on flare-stabilized bodies in air and in mixture of 85-percent CO₂ and 15-percent air, 17011

quick-response servo amplifies small hydraulic pressure differences, 6696

rapid loss, provided by high speed blowdown system, 8468

rugged switch responds to minute pressure differentials, 17996

sensor, miniature capacitor devised, 6747

temperature diagrams construction for multicomponent systems after method of Schreinemakers, geometric approach, 2359

testing of instrumentation fittings, portable fixture facilitates, 11458

water, encountered during landing of Apollo spacecraft, dynamic model investigation, 16970

see also Atmospheric pressure.

Pressure gages:

modified McLeod, eliminates, measurement errors, 1465

piezo-bar pressure probe, 14446

Pressure probe compensates for dimensional tolerance variations, 6764

Pressure regulators, high impact, withstands impacts of over 15,000 g., 16937

Pressure suits:

integrated restraint-pressure suit system, development of internal restraint system, 6727

partial, new concept, 10237

physiological, psychological, and bacteriological aspects of 20 days in full pressure suits, etc., 6723

Pressure switches, design concept for calibrator, 6763

Pressure transducers, *see* Transducers.

Pressure vessels:

Army SM-1A reactor, radiation embrittlement, projected estimates, neutron spectral effects, 1554

high speed blowdown system provides rapid pressure loss, 8468

INDEX 1967

Pressure vessels—Continued

- ships of Navy, military standard, 2154
- steels, reactor, neutron embrittlement, 5355-56
- wall of A 302-B steel, neutron exposure, through-thickness notch ductility and tension properties, 17093
- Pressure waves, finite amplitude acoustic, define propagation characteristics, 8421
- Pressurization, reverse, prevented by check valve installation in pilot operated relief valve, 6815
- see also* Tanks.
- PRESTO, program for rapid earth-to-space trajectory optimization, errata, 5157
- PRESTO II, digital computer program for trajectory optimization, 6717
- PRESTO version delta, program for rapid earth-to-space trajectory optimization, 5178A
- Prestressing:
 - prestressed concrete reactor vessel—
 - for boiling-water reactor, 13319
 - model 1, 13320
 - model 2, 13321
- Presurfacing green oak lumber to reduce surface checking, 2301
- Preuss, Luther E.:
 - absorptiometry with beta excited X-ray sources, interim report, 5770
 - compilation of beta excited X-ray spectra, 5789
- Preventing office accidents, 9713
- Prevention of accidents, *see* Accidents.
- Preventive maintenance, 9720
- Preventive medicine, *see* Medicine.
- Pribluf Islands, fur seals and other wildlife, conserve, law, 416
- Price, Don:
 - geology and water resources in French Prairie area, northern Willamette Valley, Oreg., 14179
 - ground-water reconnaissance in Burnt River Valley area, Oreg., 14182
- Price, Donna, proceedings, 4th symposium (International) on detonation, 13030
- Price, Earl A., Jr., turbulent separated flows investigation in vicinity of fin-type protuberances, 6857
- Price, Thomas R.:
 - photodegradation of high polymers in solution, 10015
 - surface effects in photodegradation of polymer films, 18113
- Price, William G., and Price current meters, description, etc., 9951
- Price lists, *see* Government publications—*also* subjects.
- Price supports, *see* Prices—*also* names of commodities, etc.
- Prices:
 - agricultural prices (periodical), 2909
 - comparison with OASDHI retirement benefits, 1966 experience, 8690
 - consumer price index—
 - city average and selected items, 3143
 - history and techniques, 2500
 - selected items and groups, 3144
 - short description, 15451
 - technical notes, 15449
 - crop values, season average prices, value of production, 8754
 - data requirements in award of contracts and subcontracts, Defense Dept., GAO report, 4867
 - Defense Contract Audit Agency review of contractors' price proposals, GAO report, 6385
 - demand and price situation, 3197
 - farm and food prices, background, 15845
 - farm-retail spreads, dairy products, 10131
 - food costs, farm prices, information relating to agriculture, 13694
 - index numbers, hydraulic turbine industry, 3415

Prices—Continued

- indexes—
- automobiles, 1967 model, 16832
- department store inventories, 6614, 16823
- medical care, report to the President, 8194A
- Pacific Northwest forest industries, 3774
- parity returns position of farmers, report, 13724
- print as Senate document, report, 15100
- poor neighborhoods, 14305
- price developments, causes, etc., 14304
- price discrimination legislation, hearings, print additional copies, reports, 916, 2030
- price support loan or resale program for farm products in commercial storage, hearings, 10627
- price supports—
- active and announced programs, 2984
- statutes, compilation, 7262
- productivity, prices, and incomes, study, 12190
- prosperity and prices (remarks), 235
- quality and pure price index, 8322
- spot market price index and prices, weekly summary, 3182
- wholesale, index numbers, 3408
- wholesale price index—
- monthly, 4067
- monthly, preliminary estimate, 8324
- prices and price indexes, monthly, 4066
- weekly, 4065
- see also* names of commodities.
- Pride, a tale of mountain life in the Ukraine, 16781
- Priede, Antra, FORTRAN program for computation of Weber functions, etc., 8484
- Priest, Joseph R.:
 - differential cross section for (d, α) reaction on scandium 45, 16989
- Interpretation of (d, α) reactions on fluorine 19 and nitrogen 15, 9873
- investigation of (d, α) reaction on aluminum 27, 6852
- Prieto, Ernesto N., relief, 13748, 16219, 17520
- Prieto, Marcial A. Marti, *see* Marti Prieto, Marcial A. (Alfredo).
- Primary batteries, *see* Electric batteries.
- Primas, James E.:
 - records of Dept. of State relating to internal affairs of—
 - Bolivia, pamphlet, 18063
 - Central America, pamphlet, 18067
 - Nicaragua, pamphlet, 18062
- records of Dept. of State relating to political relations between U.S. and Costa Rica, pamphlet, 18066
- Primatos:
 - equilibrium function, effects of pulsed ionizing radiation, 7354
- protons effects, 4179
- Primers (paint):
 - synthetic resin, for coal-tar enamel, 10073
- Primitive areas, *see* Wilderness areas.
- Prince Georges County, Md., soil survey report, 11808
- Prince William Forest Park, general information, 14553
- Prince William Sound:
 - earthquake of 1964—
 - and aftershocks, research studies, seismology and marine geology, 12117
 - horizontal and vertical crustal movement, 5940
- Princess Coal Reserve District, land disturbances from strip-mining, 17801
- Princeton University, mass spectrometer and rheogoniometer, duty-free entry, 618, 7651, 14885, 16354
- Principle of the maximum, dynamic programming and Pontryagin's maximum principle, 14387

JANUARY-DECEMBER

Principles of scientific communism, USSR, 12682
 Printed circuits, *see* Circuits.
 Printer proofreaders, *see* Proofreaders.
 Printers:
 examination announcement, 204
 hand compositor, examination announcement, 204
 monotype keyboard operator and slug machine operator, etc., examination announcement, 4410
 amendment, 13437
 printing crafts, compositor, bookbinders, pressman, machinist, lithographer, photoengraver, apprentice, 4391
 Printing:
 House of Representatives majority and minority rooms, exempt from D.C. sales and use taxes, report, 9087
 industry report, 3770
 industry, union wages and hours, 15445
 job printing shop, bibliography, 15731
 printed matter, trade and tariff information, summaries, 8765
 Printing Joint Committee:
 committee print, 7765
 Federal printing program, report on study, 10688
 paper specifications standards, 2066
 Prints:
 and pictorial illustrations, catalog of copyright entries, 968, 2141, 6137, 17682
 commercial, catalog of copyright entries, 12434, 17684
 National Library of Medicine collection, 14527
 relating to dentistry, 12995
 Prinz, William C., geology and ore deposits of Phillipsburg district, Granite County, Mont., 15305
 Priroda (periodical):
 reports on medical and biological research, 16778
 Prisk, Charles W., remarks, Dec. 5, 1966, 5475
 Prisms, reflector, spectral dispersion, for solar-cell space power systems, 15570
 Prisoners, *see* Military prisoners—Political prisoners—Prisoners of war—Prisons and prisoners.
 Prisoners of war:
 treatment under Geneva conventions, Army pamphlet, 15939
 U.S. fighting man's code, 13286
 Viet-Nam information notes, 17219
 Prisons and prisoners:
 Atlantian (periodical), 3049
 District of Columbia—
 jail inmates, authorize transfer to other institutions notwithstanding pendency of petition for writ of habeas corpus, reports, 878, 12393
 work release program for prisoners, authorize—
 hearing, 727
 law, 507
 eagle (periodical), 3216
 executions, 17128
 laws, compilation, 1982
 national prisoner statistics series 5409, 17128-129
 new era (periodical), 3620
 prisoners in State and Federal institutions for adult felons, 5409
 re-educating confined delinquents, 2798-99
 State prisoners, 1964, admissions and releases, 17129
 statistical report, fiscal year, 18148
 Prisons Bureau:
 annual report, 1818
 statistical report, fiscal year, 18148
 Pritzker, Leon, measuring quality of housing, appraisal of census statistics and methods, 13413

Privacy:
 computer role as potential invasion, hearings, 10856
 Government employees, protect—
 hearings, 7822
 report, 15121
 invasion by Government agencies, hearings, 2049, 4648, 6118
 print additional copies, reports, 10592, 10786
 privacy and behavioral research, 7107
 right of privacy act of 1967, hearings, 10858, 17662
 Private enterprise, *see* Business.
 Private express statutes, *see* Letters.
 Private International Law, Hague Conference on, *see* Hague conference on Private International Law.
 Private laws, *see* Law.
 Private pilot, written examination guide, 14071
 Private schools, *see* Schools.
 Prizes, *see* Rewards (prizes, etc.).
 PRL, *see* Personnel Research Laboratory.
 Probabilities (mathematics):
 distributions of signals and noise, 1st and 2d order, measuring system, devised, 17085
 geomorphology, probability concepts, 2366
 ionization probability of iron particles at meteoric velocities, 11406
 random process theory aids, digital data processing study, 16952
 random processes, statistical analysis, computer program performs, 2652
 structural optimization with probability of failure constraint, 5252
 target lock-on by automatic ranging system during automatic search, USSR study, 11283
 Probation:
 Federal probation (periodical), 3309
 Federal system, persons under supervision, 15821
 Probeneid, uricosuric drug administration on uric acid levels in unstimulated paratid fluid, effect, 11960
 Probes:
 antennas effects on aerodynamic characteristics of Apollo spacecraft, 12948
 atmospheric stability and drag characteristics at Mach numbers of 10 and 20, 9894
 conical, pressure, performance at Mach numbers of 3.0, 4.5 and 6.0, 5230
 glow discharge density sensor probe life is extended, 14430
 moisture content of wood products in use, accurate determination, 2298
 movable rf probe eliminates need for calibration in plasma accelerators, 17973
 pressure probe compensates for dimensional tolerance variations, 6764
 self-calibrating catalytic, use to measure free-stream atom concentration in hypersonic flow, 11408
 thermal conductivity, for soils and insulations, 4201
 thermal, for glaciers, heat transfer and performance analysis, 17377
 ultrasonic water column probe speeds up testing of welds, 5225
 see also Electric probes—Pioneer space probes.
 Problem of many bodies, *see* N-body problems.
 Problem of meeting movements, 15427
 Problem solving:
 economic calculation and cybernetics, Rumanian studies, 1309
 impulsive solution, use in optimum trajectory problems with bounded thrust magnitude, 12963
 problem of game encounter of movements, USSR study, 12676

INDEX 1967

- Problems of astrophysics (USSR periodical) : translations, 15582
- Problems of cybernetics (USSR periodical) : translations, 6526, 14230
- Problems of information transmission (USSR periodical), 3772
- Problems of virology (USSR periodical) : translations, 5026
- Procamburus, new crayfish from Alabama caves, etc., 17050
- Procedures manual for resource management at class 1 installations, 7384
- Proceedings of National Museum, 2751, 5304-16, 6043-71, 8536-50, 9952-53, 11603-612, 12998-999, 14533-546, 15602-607, 17050-51, 18089
- title page, etc., 13000, 14544-46
- Process produces chlorinated aromatic isocyanate in high yield, 6808
- Processing of food, see Food processing—also names of foods processed.
- Processing personnel actions, 3298
- Processors, data compression, parallel operating, conceptual stage, 12914
- see also Signal processors.
- Procurement, see Air Force—Air Force Systems Command—Armed Forces—Army—Defense Department—Federal Aviation Administration—Government contracts—Government supplies—Military supplies—National Aeronautics and Space Administration—Navy—Navy Department—also names of commodities procured.
- Prodoxinae, see Moths.
- Produce, see Agricultural products.
- Product Safety Commission, see National Commission on Product Safety.
- Production :
 - American industrial production, impact of waterborne commerce, 8574
 - commodity transportation survey, census 1963, production areas, 7473
 - computer production technology, USSR study, 6493
 - connecting dynamic production models into schemes, USSR study, 17860
 - coordination with science for needs, USSR study, 1262
 - defense—
 - loan guarantees, regulations, 1066
 - research and development, small business pooling, 5496
 - defense mobilization organization directory, 4460
 - defense production act progress report, hearing, 12185-186, 13543, 14916
 - engineering, problems of science, USSR study, 2432
 - farm, changes, 13247
 - industrial indexes, 1961-65, 1063
 - Latvia, State prize candidates in production, USSR, announcement, 12683
 - management, defense materials system, monograph, 9608
 - manual for Contract Administration Services, 16461
 - mine production-scheduling model, etc., for long-range planning, 9786
 - national defense, report, 2036
 - new benchmark measures, 12533, 14041
 - 1970 input-output coefficients, 17891
 - output, indexes per man-hour—
 - private economy, 8319, 11333
 - selected industries, 6612
 - steel industry, 5055
 - Pacific Northwest forest industries, 3774
 - physiological basis of methods of increasing labor productivity, USSR study, 16766
 - Poland, quantitative analysis of growth, 6482
 - procurement and production, manufacturing methods and technology, 5-year program, 15943
 - productivity, prices, and incomes, study, 12190
- Production—Continued
 - research reports, 50, 4140, 5678, 14759, 15873-874
 - surveillance, graphic charting techniques, training manual, Defense Supply Agency, 10891
 - see also Gross national product—also names or classes of commodities.
- Production control, tabular line-of-balance technique, 7433
- Production credit associations, operations, 1966, summary, 10975
- Productivity, see Production.
- Products, see Commercial products.
- Products Safety Commission, see National Commission on Products Safety.
- Professional education in the public interest (remarks), 5037
- Professional papers :
 - Environmental Science Services Administration, 15230
 - Geological Survey, 1119-24, 2363-72, 4889-91, 6397-6408, 8159-76, 9572-74, 11171-182, 12606-615, 14170-175, 15308-311, 16691-699, 17823-827
- Professional Photography Week, designate, report, 10775
- Professional workers :
 - definition under fair labor standards act, 1665
 - education of handicapped children, preparation of professional personnel, manual, 16508
 - employment in State governments, 15450
 - senior level positions, examination announcement, 8988
 - staffing American colleges and universities, 7913
 - State agricultural experiment stations and other cooperating State institutions, 5622
 - women in professional and technical positions, fact sheet, 5602
- Professionalism and the soldier, 4212
- Professions :
 - allied health—
 - educational improvement grants, 2807
 - personnel training act of 1966, law, 463
 - employment and training opportunities for women, 1669
 - health education, publications, bibliography, 5459
 - health, scholarship program, 13082
 - publications, price list, 17133
- Profiles of military chargeable services, 10296
- Profiles of newly independent states, 11826
- Profit :
 - innovation and profitability (address), 7568
 - large corporations, quarterly report, 3847
 - Profit sharing, income tax laws, and regulations, 9596
- Program aid series, 43-49, 1710-18, 4128-37, 5666-77, 7281-93, 8838-45, 10188-194, 11937-938, 13235-237, 14754-758, 15866-871, 17326-330
- Program evaluation and review technique :
 - computer PERT technique monitors actual versus allocated costs, 8458
 - PERT, Army programs, 1752
 - simplified system, 14435
 - theory of PERT and control systems, USSR study, 4932
- Programmed computers, see Electronic computers.
- Programmed instruction :
 - Belorussian SSR, status, 1218
 - catalog of instructional material, Navy, 18106
 - civil defense, orientation—
 - governmental responsibilities, 13432
 - nuclear weapons effects, 13429
 - panel book to accompany text, 14846
 - protection against what, 13428

Programmed instruction—Continued
civil defense, orientation—continued
shelters, 13430
warning, emergency operations, and support programs, 13431
complex classroom, proposed, USSR study, 9661
electromechanical model of man's muscles and its use in programmed teaching, USSR study, 2466
evaluation, USSR study, 1217
maneuvering board, course, 9078
military schools adopt programmed teaching methods, USSR, 16756
prediction of success in instructional programmer school, 17345
programmed learning, Air Force manual, 8850
radiation monitoring, programmed instruction book, 15973
Soviet, recent advances, 6495
theory and practice, USSR studies, 1297
USSR, state of development, etc., 11248

Programmers:
career opportunities, IRS, 6459
computer specialists, computer programmer, computer systems analyst, examination announcement, 13441

Programming (computers), see Electronic computers.

Programming (mathematics):
dual problems in convex and convex-fractional programming in functional spaces, USSR study, 17862
dynamic programming and its application to optimization problems of flight mechanics, 11572
dynamic programming and Pontryagin's maximum principle, 14387
linear fractional programming, USSR study, 8263

Programming (planning):
libraries, statewide long-range planning, conference report, 1016
planning-programming-budgeting system—hearings, 15158
initial memorandum, 16415
official documents, 13866
print additional copies, report, 15140
Post Office Department, description, 5389
remarks, 17842
selected comment, 13867
print additional copies, report, 15135
Post Office Department, planning for tomorrow's postal service requirements, etc., 8614
program analysis techniques, bibliography, 1824
State and local programs, criteria for evaluation, study, 16411

Programs for the handicapped (periodical), 15316

El progreso de la instrucción pública en los Estados Unidos de América, 1966-67, 13952

Progress-American women, 3776

Progress in sport fishery research, 12548

Progress, Missouri River Basin, 3777

Prohías, Darío L. Platas, see Platas-Prohías, Darío L.

Project Apollo (man-in-space program):
accident, Jan. 27, 1967, hearings, 6088-89, 9299, 10796, 12916, 12396
Apollo reliability and quality assurance program plan, 2593, 11393
Apollo/Saturn V replica model, design and fabrication considerations, 16988
Apollo 204 Review Board report to Administrator, NASA, 9931, 17020
Apollo wind tunnel testing program, historical development of general configurations, 2722
command module—
low-speed dynamic-model investigation of configurations in Langley spin tunnel, 14432
stability characteristics, 8500

Project Apollo—Continued
entry flight aerodynamics from Apollo mission AS-202, 17009
manned space flight, NASA facts, 8481
midstream appraisal (lecture), 5498
pace and progress of program, staff study, 10676
passive infrared acquisition and tracking system, analysis, 5177
pilot-controlled docking simulation of command and service module with lunar module, 2689
sextant navigation measurements during lunar module rendezvous, analysis, 6903
space program in post-Apollo period report, 7050
vehicle under entry conditions encountered during lunar return, trajectory optimization, 9919

Project Charlot (nuclear excavation):
areal geology in vicinity of Charlot site, 8162
potential effects on local water supplies, northwestern Alaska, 2369

Project Dribble (Salmon event):
Vela Uniform program—
decoupled nuclear explosion, earth vibrations from nuclear explosion in salt dome, 8911
seismic velocity determination and distance measurements in salt dome, 1808
timing and firing, 1810
vent-gas treatment plant, 1809

Project Dugout (Plowshare program):
multiple row charge blast-wave observations at long range, 1798

Project EOLE, see Satellites.

Project Fire (flight reentry program):
flight II, body motions and angles of attack during reentry, 18020

Project Fire Scan, fire detection interim report, airborne infrared mapper used as tool in survey, 8106

Project fog drops, investigation of warm fog properties and fog modification concepts, 6712

Project Gemini (man-in-space program):
earth photographs from Gemini missions, 12880
Gemini IV mission, terrain photography, 11528
manned space flight, NASA facts, 17949
pictorial review, 1438

Project Handcar (Plowshare program):
strong motion and surface accelerations, 5782

Project Head Start:
beautiful junk, inexpensive materials for preschool program, 17709
child development programs—
how to apply, instructions, 6163
manual of policies, and instructions, 16483
community action program, child development center, points for parents, 10912
daily program for child development center, manual for teachers, 15204
fact sheet, 6166
health services, guide for project directors and health personnel, 12450
how you can help, 10911
newsletter, 3392
physician and Project Head Start, 6165
series, 10911-912, 12450, 15204

Project Hindsight, 1st interim report, summary, 7857

Project LITE (legal information through electronics):
Air Force management, hearing, 15034

Project Mercury (man-in-space program):
aerodynamic heating of afterbody, flight test data compared with prediction methods, 14372

INDEX 1967

Project Mercury—Continued
 environmental control system, technical history, 18009
 manned space flight—
 history, 8438
 NASA facts, 17949
 second mission, description, etc., 6865
 Project moneywise, role of credit unions in war on poverty, 8451
 Project Moon-Blink, general information, 1429
 Project Palanquin (Plowshare program):
 apparent crater studies, 4237
 Project Pre-Gondola (field cratering experiment):
 clouds, lidar observations, final report, 17397
 preshot geophysical measurements, 15962
 structures instrumentation, 17396
 Project Pre-Schooner (field cratering experiment):
 apparent-crater studies, final report, 13342
 concrete stem for access hole, design, construction, and postshot evaluation, 17395
 geologic and engineering properties investigations, final report, 17394
 technical director's summary report, 5781
 Project Sealab (man-in-the-sea program):
 45-day undersea saturation dive, report, 11669
 Project Sedan (Plowshare program):
 fallout from deeply buried nuclear detonation and aerial radiometric survey, 7426
 Project Seesaw, beginning for rural disadvantaged in Louisiana, 8284
 Project Stormfury, ESSA fact sheet, 16538
 Project Sulky (Plowshare program):
 crater measurements, 4236
 scientific photography, 4235
 Project Surveyor (unmanned lunar exploration):
 program, failure reporting and management techniques, 14406
 Surveyor, NASA facts, 17950
 Surveyor III, preliminary report, 14403
 Project Tech Top, lunar, planetary, and solar topography, study, 5163
 Projectiles:
 cratering in low-density targets, 11420
 flight characteristics, design for control, engineering design handbook, 1751
 impact sensitivity of explosives, study, 14343
 penetration of high speed particles, multivariable analysis of mechanics, 6708
 size effects on hypervelocity impact craters in aluminum, 14468
 Projection screens, *see* Screens (projection).
 Prok, George M., estimation of electron cross sections for molecular hydrogen, 11546
 Prokopius, Paul R., dynamics of water rejection from hydrogen-oxygen fuel cell to hydrogen stream, 18031
 Prolate spheroids, *see* Spheroids.
 Promise of New Asia, 2880
 Promoting worker interest, 9704
 Promotions:
 Armed Forces medical and dental officers, provide opportunities, report, 14943
 Army, enlisted promotion system, pamphlet, 10266
 personnel promotion system of Post Office Department hearing, 10669
 women in Armed Forces, remove restrictions—
 hearing, 9148
 report, 10565
 Proofreaders:
 printer, examination announcement, amdt., 204
 printer-proofreader, examination announcement, amendment, 13437
 Propaganda, *see* Communism.

Propagation:
 combined propagation of unicellular algae and bacteria, Hungarian study, 12691
 radio waves—
 antipodal region of radios station NPM, Hawaii, airborne field measurements, results, 5345
 5GHz in Europe, comparison of predictions and measurements for various types of paths, 6223
 line of sight UHF/SHF, deep and/or rapid fading phenomena aspects, 6225
 long and superlong, in earth-ionosphere waveguide channel, 17873
 USSR papers, 4939
 sonic-boom, effect of inversion waves, 9427
 UHF waves in troposphere, 6508
 waves of finite amplitude in thermoviscous media, 1434
 Propagation of sound, *see* Sound.
 Propanes, fog dispersal experiments, Walla Walla, Wash., 11984
 Propellant gages, *see* Radiotracer propellant gages.
 Propellant tanks, *see* Tanks.
 Propellants:
 cold solid propellant rocket motor as stop-restart capability, 6830
 dynamics in large rocket booster, orbital investigation, 11517
 feed system coupling, effect on analysis of chugging, 11491
 gas chromatographic column enables analysis of propellant hydrazines, 2681
 high energy, bibliography, 11431
 liquid—
 factors influencing heat transfer to rocket-thrust-chamber coolant channels, 1484
 reorientation, experimental investigation, 5261
 multistage liquid-propellant launch vehicle response to longitudinal excitation, 11522
 rocket, thixotropic gels, study, 10005, 11679
 solid—
 medium temperature, vortex valve study, 2651
 proportional secondary injection thrust vector control study, 2604
 rocket motor performance computer programs using group transformation method, 1483
 rocket motors, structural dynamics, 2611
 transverse-mode combustion instability in vortex burner, experimental investigation, 1511
 storable-propellant rocket engines, ablative-material thrust chambers as components, evaluation, 15555
 subliming-solid-propellant thruster systems for attitude control of spacecraft, performance, 6884
 vaporization, frequency response characteristics, analysis, 5235
see also Fuel.
 Propellers:
 aircraft—
 current industrial reports, 15990
 left- and right-hand rotation, on large semispan tilting wing, aerodynamic data, 6855
 single, on large semispan tilting wing, aerodynamic data, 9879
 type certificate data sheets and specifications, 3017
 airworthiness standards, Federal aviation regulations, 9442
 ducted, 7-foot-diameter, wind-tunnel investigation, 15573
 propeller-rotor whirl flutter, review, 12971
 Property, rental, District of Columbia, used for residential purposes, require publication of owners' names, hearings, 2113

Property—Continued

see also Enemy property—Personal property—Public property—Real estate—Sales—Surplus property.

Property rights:

family and property law, summary—
New Jersey, 10138
New York, 10139
Ohio, 13187

Prophylaxis:

and treatment of radiation illness, problems, Rumanian study, 4931
poisoning of white rats with sarin, Bulgarian study, 6544
poliomyelitis, USSR study, 1266
principle, in health protection in Rumania, 1160
vibration diseases, USSR study, 11265

Prophylaxis pastes, see Dentrifices.

Proportional counter tubes, see Proportional counters.

Proportional counters:

aluminized thin-window proportional counter tube is stronger, more responsive in long wavelength region, 8451
Halpern-type neutron detector, study, 11592

Propulsion:

Aerobee 150 propulsion failure, causes, etc., 6851
and power production, French frigate Suffren, 9670
nuclear, cooldown characteristics of regenerative nozzle used in cold-flow rocket test facility, 11500
ships, magnetohydrodynamic prospects, USSR study, 14256
system, integration with airframe for Mach 6 cruise vehicles, 18010

Prose, poetry, and black power, 9407

Prospecting:

contributions to geochemical prospecting for minerals (series), 4886
suggestions for prospectors, techniques, etc., 8575

Prospector, cowhand, and sodbuster, historic places associated with mining, etc., in trans-Mississippi West, 13008

Prosperity:

and prices (remarks), 235
challenges in sustaining prosperity, seminar on manpower policy and program, 5041
in times of prosperity, Good Lord, preserve us (remarks), 17269

Prostheses:

immediate postsurgical prosthetics in management of lower extremity amputees, 13171

prosthetics research, bulletin, 11889, 18246

prosthetist examination announcement, 17455

Veterans Administration work, hearings, 10681

Prosthesis, Orthopedics, and Traumatology imeni M.I. Sitenko, Khar'kov Scientific Research Institute of see Khar'kov Scientific Research Institute of Prosthesis, Orthopedics and Traumatology imeni M.I. Sitenko.

Prosthetic and Sensory Aids Service, Veterans Admin., work, hearings, 10681

Prosthetics, see Prosthesis.

Prostka, Harold J., igneous geology of Dry Mountain quadrangle, Jefferson County, Mont., 2358

Protecting Ag pilot, 140

Protective clothing, see Clothing.

Protective coatings, see Coating materials.

Protective equipment, see Safety equipment and appliances.

Protective shelters:

Adirondack-type, building plan, 10186

fallout shelters—

architectural design, shielding requirements, influence on form, 8981

architectural, engineering, and consulting firms with certified analysts, directory, 13424

community development and civil defense, technical report, 16059

community planning, seminar and workshop, guide, 14843

dual-purpose designs receiving awards in Brooklyn competition, 7529

for homes with basements, handbook, 13425

how are labor union members affected?, 4383

HUD aids, 12625

improving protection in home basements, evaluating techniques, 5765

in schools, civil defense program materials, 16052

management handbook, 5916

national design competition, community center, awards, 16060

national survey program, joint civil defense support group, phase 1 survey instructions, 15226

new buildings, civil defense program materials, 17451

new buildings, designing, manual for architects, 7530

nuclear defense design for architects and engineers, courses, announcement, 16053

policy resolutions of AFL-CIO, 1903, 17452

programmed orientation to civil defense, 13430

radiation shielding, design and analysis, 14847

shelter management, textbooks, 16057

3-bedroom rural dwelling, building plan, 13232

field CBR collective protection, Army technical manual, 5740

maintenance of civil defense shelters, USSR study, 12756

personal and family preparedness for survival, 1905

Proteins:

concentration level related to parotid fluid flow rate, 10230

contractile muscle proteins, USSR studies, 15346

egg white, heat stability under minimal conditions that kill salmonellae, 11918

fish concentrate, experiment and demonstration plant, law, 415

globular structure, data from X-ray structural crystallography, USSR study, 12726

human serum protein concentration, estimation of change during simulated altitude and aerospace flights, 7342

intake effects on nitrogen retention and growth of cattle, 1723

mathematical methods in interpreting and evaluating proteinogram and their practical significance, USSR study, 12694

milk, dye-binding evaluation method, 4152

myofibrillary, functional role of subfractions, USSR study, 14228

nerve fiber proteins (neuroaxial), USSR biochemical and histochemical studies in experimental allergic demyelinating encephalomyelitis, 14213

parotid fluid, flow rate effect on level, 7363

phosphoproteins, metabolism in experimental atherosclerosis of liver, USSR study, 1275

protein nutrition, biochemistry, USSR book review, 15405

INDEX 1967

Proteins—Continued
 water-soluble protein fraction of human brain, spectral characteristics, USSR study, 12707
 Prothrombin, quality control in coagulation procedures in 1-stage prothrombin time, 17358
 Protons:
 and space travel, introduction, 1731
 bombardment, high-purity, single-crystal silicon, 11534
 chemical displacement in double-bond, rule for estimating, 12727
 effects on primates, 4179
 low energy, trapped radiation environment models, 16929
 space environment, biological effects, estimate, 4176
 stopping power and range tables, 5192
 Protozoa, subject catalogue, 15
 see also *Gymnodinium breve*.
 Providence, R.I., area wage survey, 14290
 Providence County, R.I., bedrock geology of Chepachet quadrangle, 16685
 Proving grounds, Bahamas long range, agreement with United Kingdom, 17241
 Provost marshal, Union Army papers, pamphlet to accompany microcopy relating to individual civilians, 18061
 Provus, Malcolm, staffing for better schools, 16511
 Prowers County, Colo., soil survey report, 7137
 Prunes:
 dried, canned, U.S. standards for grades, 13891
 industry of France, 12565
 production, use, value, 1965-66, by States, 14695
 Pruning:
 open-grown black cherry, 17803
 root pruning of mahogany nursery stock, 12572
 special pole pruner cuts branchlets from tree tops, by helicopter, 11123
 teak, effects, 12576
 Pryor, William H., jr.:
 effect of nitrogen dioxide-nitrogen tetroxide on oxyhemoglobin dissociation, 13270
 gamma radiation LD 50(30) for rabbit, 17347
 Przedpelski, Zygmunt J., lift fan technology studies, 11402
 PSAC, see President's Science Advisory Committee.
 Psammocora contigua, see Corals.
 Pseudatteria, see Microlepidoptera.
 Pseudophilomidae, see Crustaceans.
 Pseudotsuga macrocarpa, see Fir.
 Psolid holothurian genus *Lissothuria*, 8550
 Psoriasis, description, symptoms, etc., 14627
 Psychiatric clinics, see Clinics.
 Psychiatric nurses, see Nurses and nursing.
 Psychiatrists, jobs and mentally restored, memo, 5051
 Psychiatry:
 development in Tadzhikistan, 4983
 geographic and astronomic distance responses by rated officers in mental status examination, 4174
 nursing, institutions offering trainee stipends for graduate and undergraduate education, 11760
 rating scales handbook, 1573
 Physical research, see Extrasensory perception.
 Psychoacoustics, table of intensity increments, 136
 Psychoactive agents, see Psychotropic drugs.
 Psychochemical warfare, see Chemical warfare.
 Psychologists:
 clinical, counseling, etc., examination announcement, 12113

Psychologists—Continued
 psychologists in mental health, 1964 survey, 5458
 research, examination announcements, 200, 16071
 Psychology:
 and the theory of learning, USSR study, 14268
 aspects of 20 days in full pressure suits, 20 days at 27,000 ft. on 100% oxygen and 34 days of confinement, 6723
 bibliography, Air Force Academy Library, 10206
 careers in Veterans Administration, examination announcement, 12113
 effect of variables on job satisfaction and intent to re-list, 7370
 experimental research, USSR study, 16783
 PACAF basic bibliographies, 11950
 philosophical development of theories, USSR study, 5024
 sets and cybernetics, USSR study, 8264
 wonder and mystery of psychics, USSR study, 6528
 see also Parapsychology.
 Psychomotor tests, see Mental tests.
 Psychopharmacology:
 abstracts, 3780
 animal research, handbooks, index, 7083
 bulletins, 1585, 8641, 17161
 Czechoslovakia, recent research, 16774
 Psychophysiology:
 psychophysiological analysis of labor activity, USSR study, 11260
 space, effect of high and low afferentation on human organism, USSR studies, 1345
 Psychotics, see Mentally ill.
 Psychotronics, Trojan horse of irrationality, USSR, 11259
 Psychotropic drugs:
 and related compounds, tabulation, 11752
 ethnopharmacologic search for psychoactive drugs, symposium, proceedings, 17173
 Pterophyllum, see Angelish.
 Public administration, executive development programs in public service, university-sponsored, 2193
 Public affairs, see Public information.
 Public assistance:
 aid to families with children in Cleveland and Cuyahoga County, Ohio, study, 4386
 aid to families with dependent children—in Gary, Ind., 13435
 protective payments, report, 9060
 California welfare recipients, nursing home care, etc., GAO report, 2354
 caseloads, impact of training programs under Manpower development and training act and Area redevelopment act and public assistance work and training programs, 3406
 cases, reasons for opening and closing, 7941, 13996
 costs of State and local administration, services, and training, 15233, 16541
 costs per case month, 1966, for administration, services, and training, 13995
 Federal assistance programs, catalog, 12447
 health services, coordinated funding, in projects receiving or eligible for assistance under programs of HEW and OEO, 13938
 limiting money payments to recipients, State maximums and other methods, 18205
 medical care—
 paid through payments to vendors, utilization, 10974
 vendor payments by type of service, 10971
 vendor payments, recipients, 16542
 vendor payments, recipients and amounts, 13997

Public assistance—Continued
 program under social security, amend act,
 hearings, 7763, 10684
 source of funds expended for payments,
 9436, 16543
 source of funds expended for payments
 and cost of administration, services,
 and training, 4752
 special types, money payments to recipi-
 ents, 4751
 State agencies be required to make needed
 changes, message from the President,
 12198
 State-Federal programs, improvement, so-
 cial security amendments of 1967—
 hearings, 15154, 16409
 reports, 14953, 14964
 summary, 15053
 State salary ranges of positions in public
 welfare, 4898, 11194
 statistics, monthly advance release, 2988
 unemployed-parent segment of aid to fam-
 ilies of dependent children, 3988
 welfare in review (periodical), 4061
 statistical supplement, 5596
 welfare programs and services, facts, 7234
 work and training programs, impact on
 caseloads, 3406
 see also Social work and problems.
 Public Broadcasting Corporation:
 establish—
 hearings, 13710
 reports, 10756, 14980
 Public buildings:
 accessibility to physically handicapped, in-
 sure—
 hearing, 15173
 report, 15124
 act of 1959, amend—
 hearing, 960
 reports, 627, 931
 Federal, disaster control and civil defense,
 change, 14613
 foundations, subsurface exploration for
 and design and construction, GAO re-
 view, 11156
 Government leased, construction, modifica-
 tion, etc., to comply with provisions of
 Davis-Bacon act, hearing, 17674
 painting contracts on Federal facilities in
 Washington area, irregularities in per-
 formance, hearing, 15083
 Public Buildings Service:
 inspection controls over concrete place-
 ments in building construction projects,
 GAO review, 11153
 subsurface exploration for and design and
 construction of foundations for public
 buildings, GAO review, 11156
 Public contracts, see Government contracts.
 Public debt:
 Federal debt management (remarks), 2951
 increase in ceiling—
 hearings, 6049, 6097, 10685, 12407
 laws, 9033, 13526
 Public law 89-49, legislative history,
 2063
 public law 89-472, legislative history,
 2063
 public laws 90-3 and 90-39, legislative
 histories, 15051
 reports, 6003, 6008, 6086, 9081, 10621,
 12249, 12273, 13636, 13799
 Treasury Department circulars, 2948,
 5570, 7208, 8773, 13167-169
 Public Debt Bureau, appropriations, 1968,
 additional, amendment, proposal, 10695
 Public Documents Division:
 classified list of Government publications,
 17131
 price lists, 1564, 2800-4, 5413-19, 7052-
 58, 8623, 10037-41, 11712-713, 15669-
 672, 17132-136, 18149-151

Public domain, see Public lands.
 Public education, see Education.
 Public employment, see Employment.
 Public facilities:
 State and local needs and financing, study,
 1977
 print additional copies, reports, 6082,
 10586
 Public health, see Health—Public Health
 Service.
 Public health advisors, program of PHS,
 10044
 Public health analysts, program of PHS,
 10064
 Public health nurses, see Nurses and nursing.
 Public health schools offering nurse trainee-
 ships for full-time academic study, 5464,
 15710
 Public Health Service:
 act, amend—
 hearings, 12305, 17670
 laws, 461, 463
 reports, 16230, 16247
 advisors and analysts program, 10064
 air pollution courses, 2806
 appropriations, 1967, supplemental, hear-
 ings, 2046
 appropriations, 1968—
 amendments, 10517
 hearings, 10631
 law, 12170
 report, 10766
 career opportunities—
 general information, 11721
 pharmacist, 15676
 physical therapist, 18155
 scientists, 8652
 veterinarian, 13156
 careers in nursing, 10042
 CCPM pamphlet, 10043
 commissioned officer student training and
 extern program, 10043
 conference, of Surgeon General, with State
 and territorial mental health authorities,
 proceedings, 5457
 construction grant programs, labor stand-
 ards provisions, 8637
 cooperative studies, renal disease and hy-
 pertension, conferences, proceedings,
 17160
 coordinated home care programs, develop-
 ment and administration, guide, 5432
 CORD, commissioned officer residency
 deferment program, 8626
 Environmental Engineering and Food
 Protection Division, research grants,
 5463
 fellowships, nurse, special research, 15711
 film catalog, 17045
 grade A pasteurized milk ordinance, 1965
 recommendations, 14624
 grants and awards, 1966 funds—
 construction of facilities, 11755
 health services, formula, project,
 regional medical planning, etc., 8644
 mental health research, 14630
 mental health training, 14631
 research, 7085-86
 summary tables and graphic highlights,
 15706
 grants for health services made to Wash-
 ington State, financial administration,
 GAO review, 14160
 grants for research projects, policy state-
 ment, 11756
 grants for training projects, policy state-
 ment, 13091
 group life insurance program, annual re-
 port, 8778
 health information leaflets and pamphlets,
 list, 18171
 health research facilities, construction pro-
 gram, Surgeon General's report, 524,
 12207

INDEX 1967

Public Health Service—Continued
hospitals—
dental internships, 15679
diagnostic and demographic data of patients discharged, statistical summary, 8629
pharmacy residencies, 13087
Indian and Alaska native health program, nurses, examination announcement, 10436
Indian health program, report to the first Americans, 11761
information submitted on public health personnel, 10059
management intern program, 10065
medical care responsibilities, legal aspects, 1582
nurses in Indian health program, examination announcement, discontinuance notice, 10423
public advisory groups—
authority, structure, functions, 2831, 11750
roster of members, 8650
public health laws, compilation, 4547
publications, 1581, 11741, 17153
regulations on biological products, etc., 11720
research grant projects, accident prevention, references to publications, 8645
research grants index, 8647
research grants of NIH, administration, report, 17575
residencies for physicians, general information, 8648
senior clinical traineeships, cancer control, 14618
technical information bulletin, 17164
traineeship program—
professional health personnel, 15713
professional nurse full-time academic study, 5464, 15710
professional nurse short-term courses, 8652, 17162
training grants, traineeships, fellowships, etc., 7086
uniformed services, joint travel regulations, 3455
Public Housing Administration, local authorities participating in low-rent programs, 3520
Public information :
act, effect on member banks, 14042
availability from executive departments and agencies, Attorney General's memorandum on public information section of administrative procedure act, 12762
catalog of current information materials, Armed Forces Information and Education, 7374
clarify and protect right of public, codify provisions of Public law 89-487—
law, 12165
reports, 7707, 10780
Federal Reserve System Board of Governors, rules regarding availability, 14047
legislative, mechanization of USAEC library, 5790
Navy Department, direction for commanders and public information officers, 3209
news policies in Vietnam, hearings, 953
newsman's privilege, 2129
photographic manual, Naval Air Systems Command, 2763
Post Office Department, PI series, 1559, 2791, 13056, 17119
public affairs handbooks for—
community action agencies, 13940
Navy chaplains, 13028
see also Public relations.
Public Land Law Review Commission :
appropriations, 1968—
hearings, 7734
law, 12170
reports, 10560, 10766, 12252

Public Land Law Review Commission—Con.
extend, and increase authorization—
hearings, 15040
report, 14970
Public lands :
Agriculture Dept. jurisdiction, cash equalization of exchanges, report, 2084
appeals, Interior Department decisions, 3429
camping on public lands, State sites, facilities, etc., 8328
classify for disposal or interim management under multiple use principles, law implement, hearing, 10853
code of Federal regulations, 12527
forested lands of Pacific Northwest, development (remarks), 8210
geothermal steam deposits, disposition, hearings, 4546, 12411, 15037
how to buy, 15456
Interior Department decisions, 3426
land exchange in national forest system, 17320
National Advisory Board Council, proceedings, 27th annual meeting, 12778
Nevada and Oregon, grazing reserve for Indians of Fort McDermitt, Nev.—
law, 17552
report, 15112
our public lands (periodical), 3663
public domain, its place in our history, etc., 2525
sale, temporary authority, law, implement, hearing, 10853
statistics, 9748
Taylor grazing act, amend to clarify exchange authority, report, 875
what are public lands?, 8327
see also names of States, etc., where lands are located.
Public law 480, *see* Agricultural trade development and assistance act of 1954.
Public laws, *see* Law.
Public library program amendments of 1966, 1135
Public management, *see* Administrative management.
Public Management, National Commission on, *see* National Commission on Public Management.
Public papers of Presidents of United States, 1059, 2256, 4780
announcement and order form, 8622
Public participation in processes of Government, 10523
Public policy :
implications of investment company growth, report, 2035
science, Government, and public policy Government-science relationships during 89th Congress, 13716
Public Printer, *see* Government Printing Office.
Public printing and binding :
Federal printing program, report on study directed by Joint Committee on Printing, 10688
procurement of printing of technical manuals from equipment contractors, GAO report, 2345
Public property :
administration, NASA regulations, 18058
administration of Government property by contractors, guidance, 16456
code of Federal regulations, 9481
Federal property and administrative services act, amend, report, 13794
maintenance of grounds, engineered performance standards, handbook, 11625
management, code of Federal regulations, 6286-90, 9478-80
transferred to other Government departments by RFC, payment in lieu of taxes, extend—
law, 13531
reports, 10606, 13793

Public regulation of business, Treasury view, 11884
 Public relations, dissemination of information about the handicapped (remarks), 18140
 Public roads, *see* Roads and highways.
 Public Roads Bureau :
 annual report, 5474
 supplement, 7101
 director, nomination of Francis C. Turner, hearing, 7826
 engineering opportunities for college student, bridge to your success in highway engineering training program, 1593
 Federal-aid interstate highway frontage road near Billings, Mont., justification, GAO review, 2348
 highway engineering training program, opportunities for young engineers, 18192
 John Day River Bridge, interstate route 80N, Oregon, review of circumstances relating to collapse, GAO report, 4877
 press releases, 8756
 professional highway engineer, opportunities, 18193
 transfer—
 law, 389
 report, 906
 Public safety, *see* Safety of life.
 Public schools, *see* Schools.
 Public Television Corporation, establish, hearings, 10824
 Public utilities :
 Alaska earthquake, Mar. 27, 1964, effects on transportation, communications, and utilities (series), 6402, 12609
 holding companies, security transactions and holdings, 3653
 south-central Alaska, 1964 earthquake effects, 12609
 State utility commissions, summary and tabulation of information, 17655
 Public welfare :
 agencies, information services, 10134
 code of Federal regulations, 7984
 community work and training program, message from the President, 7606
 departments, opportunities for volunteers, 13184
 extend certain programs, law, 13523
 intake and case recording, fact-finding report, Santa Clara County Welfare Department, San Jose, Calif., 10973
 national blueprint for, 4897
 personnel, 1965 statistics, 12483
 see Social work and problems.
 Public works :
 appropriations, 1967—
 hearings, 939
 law, 403
 appropriations, 1968—
 hearings, 10634, 12287, 16393
 report, 13678
 authorization, 1966, rivers and harbors, flood control, etc.—
 law, 493
 report, 698
 code of Federal regulations, 9481
 economic development programs, status, etc.—
 reply of EDA to Subcommittees interim report, hearing, 12313
 report, 7682
 EDA grants and loans for public works and development facilities, 7869, 13935
 Engineers Corps, Army—
 civil functions, John Day River Bridge, interstate route 80N, Oregon, review of circumstances relating to collapse, GAO report, 4877
 civil works activities, report 1966—
 departmental edition, 16518
 document edition, 16151

Public works—Continued
 Engineers Corps Army—Continued
 State-constructed Del Valley Dam and Reservoir, Alameda County, Calif., planned Federal contribution toward cost, GAO review, 6384
 maintenance, engineered performance standards, 17067
 handbooks, 11625, 14567
 management, Navy, 2781
 public works and economic development act of 1965—
 maximum grant rates in qualified areas, 4685, 15202
 project activity supplement, 6159
 title 5, amend—
 hearings, 13713
 law, 17548
 reports, 7788, 12359, 14957, 14974, 16265
 Public Works Committee, House :
 calendar, 3483
 committee prints, 6041, 15048, 16340-341, 17611
 hearings, 750-751, 2055-56, 4558, 9168, 12311-314, 13713
 Investigations and studies—
 authorization, report, 6023
 expenses, report, 9103
 legislative activities, 89th Congress, 6041
 reports, 627, 670, 4506, 7682, 9122, 13630, 14957, 14989, 16272-273, 16290, 17577
 travel authorization, report, 7717
 Public Works Committee, Senate :
 additional staff and funds, authorization, reports, 4591, 4615
 calendar, 3501
 committee prints, 4658, 17675
 hearings, 960, 4657, 6125-26, 7825-27, 10871, 12426-427, 13856, 13883, 15153, 15173-174, 15176, 16433-435, 17673-674, 17676
 legislative activities and accomplishments, summary, 89th Congress, 4658
 reports, 883, 885-886, 931, 2095, 2100, 4591, 7788, 9297-98, 10726-727, 10732, 10769, 12359, 13821, 15124, 15126, 16377
 Publications :
 criteria for evaluating scientists, quality and quantity, 1709
 Federal item identification guides for supply cataloging, supplements, 3292
 International exchange, convention concerning, report, 9188
 see also Government publications—*also* names of departments, etc., issuing publications—*also* subjects.
 Publicity, prejudicial, affecting administrative procedure, amend act, hearings, 13871
 Publishing, industry report, 3770
 Puckett, H. B., automatic feeding equipment for livestock and poultry, 8830
 Puddle Springs quadrangle, Wyo., geology, 12902
 Puente, Floriberto S., relief, 12239, 12345, 13498
 Puente, Julio M., motor carrier accident, 16872
 Puerto-Cito Reservation, rural electric facility, dedication (remarks), 15875
 Puerto Ricans, workers, impact of changing economy, statistics, 16831
 Puerto Rico :
 agriculture departments, 1967 directory, 7836
 and other outlying areas, 1960-66, estimates of population, 5880
 climatological data, 3096
 coast pilot, 17467
 supplement, 7553
 coastal warning facilities chart, 11905
 commodity classification, reporting shipments to U.S., schedule P, 10386
 county business patterns, 5851, 13385

INDEX 1967

Puerto Rico—Continued
 fertility and educational attainment, 15715
 50th anniversary of American citizenship, report, 9263
 nautical chart catalog, 4415
 nurses in public health, number, educational preparation, etc., 17155
 petroleum refineries, mineral industry survey, 15472
 plant regulatory officials, 5618
 political status—
 background studies, 2960
 report, 2959
 settlement, economic factors, 10690
 settlement, hearings, legal-constitutional factors, 763
 settlement, hearings, social-cultural factors, 2068
 schistosomiasis, prevalence, skin test survey, 8654
 soil survey laboratory data and descriptions, 14661
 stratigraphy, Cretaceous and lower Tertiary, in west-central area, 17820
 U.S. Army, Southern Command, personnel ordered to helpful hints, DA pamphlet, 17384
 U.S. trade, monthly report, 3359
 weather in Luquillo Mountains, 14130
 Puget Sound Naval Shipyard, certain employees, relief, 824, 9223, 13496, 13565
 Puget Sound Plywood, Inc., relief, 602, 771, 7660, 9226
 Pugwash conference, 16th, report, 1234
 Pulaski, County Ark., water resources, 8181
 Pullets, see Chickens.
 Pullman Company, 1965 transport statistics, 8236
 Pulmonary diseases research conference, phatic absorption of radioactive albumin from lungs, 13269
 Pulmonary diseases research conference, transactions, 13172
Pulp:
 current industrial reports, 3169, 8944
 industry industrial plant equipment handbook, 4675
 industry report, 3788
 Pulp wood, see Wood pulp.
Pulpboard:
 current industrial reports, 3169
 hardboard, standard of trade, 12978
 particleboard, current industrial reports, 5870, 12077
 wood-base fiber and particle panel materials, thermal conductivity, 14124
 Pulpwood, see Wood pulp.
 Pulse analyzers, multichannel height, inexpensive, features low power requirements, 15536
 Pulse autocorrelator electronic system, accurately determines laser measurements, 16968
 Pulse generators, using transistors and silicon controlled rectifiers produces high current pulses with fast rise and fall, 1455
 Pulse modulators:
 circuit multiples width modulation, etc., 9828
 laboratory uses minority carrier storage diodes, 14428
 Pulsed reactors, see Reactors (atomic).
Pulses:
 amplitude, boosted with one transistor circuit, 1464
 high interval stability, electronic circuit delivers, 2636
 neutron pulse propagation techniques, symposium proceedings, 12003
 output timing errors, modified univibrator compensates, 12334
 radar, coding system for clutter suppression, analysis, 10018, 14596
 short-pulse techniques, 9996

Pulses—Continued
 stretcher has improved dynamic range and linearity, 5148
 technique provides more accurate check-out of exploding bridge wire device, 2672
Pulses (seeds):
 dried, foreign agriculture circulars, 3345
 Pulverizing lignite in ball mill, 15476
 Pumice, minerals yearbook chapter, 1407
 Pumped storage for hydroelectric power, selected list of references, 14707
 Pumping machinery, see Pumps.
Pumps:
 axial-flow, 2-stage, with tandem-row inlet stage, blade-element performance, 11513
 centrifugal, method of rating, military standard, 13924
 coal-fired water pump, 1408
 current industrial reports, 437, 17434
 farm, current industrial reports, 3169, 4327, 15996
 Federal item identification guides for supply cataloging, supplements, 3288
 inducer, hubless, performance in water and liquid nitrogen, 6860
 oil-well rotary, deposition in, of barium sulfate from sea water, 11386
 oscillations, reduced by negative feedback system, 8473A
 pump and reeled hose system for studying vertical distribution of small Plankton, evaluation, 14065
 simple, maintains liquid helium level in cryostat, 8465
 single-phase induction electromagnetic pump, 9909
 water, electric, on farm, 10176
 Punched card systems, coding and key-punching, geological information form for core, grab, and dredge samples instructions, 6997
 Punched tape, tester automatically checks paper tape punch and reader after maintenance, 15537
 Punishment, see Imprisonment.
 Punnett, Eileen L., relief, 9255
 Punta del Este, Uruguay:
 commitment for progress, the Americas plan for decade of urgency, declaration of Presidents of America, 11828
 Latin American summit conference—support historic new phase of alliance for progress
 hearings, 7747, 7807
 reports, 7715, 9098
 understandings on behalf of U.S., recommendations, message from the President, 7610
 welcoming, etc., report, 10728
 Pupils (students), see Students.
 Purcell, Ganson, Jr., blood clotting studies in submarine crew, 12790
Purchasing:
 Agricultural Stabilization and Conservation Service, reports, 3789
 buyer's assumption of risk in international sales, Bulgarian discussion, 5013
 consumer buying indicators, series, 1878, 5884, 14832, 16027
 could you use multimillion dollar customer? VA invites you to submit your product or service, 2965
 dairy products under price support program, 1965-66 marketing year, 21
 Federal Aviation Administration, procurements in Pacific region, GAO review, 11155
 fish and shellfish, buying guide, 15257
 food, how to use USDA grades in buying, 5671
 Government guide for businessmen, 1104
 instant nonfat dry milk, how to buy, 15855
 national forest timber, 11103
 surplus personal property, how to buy from Defense Dept., 10897

Purchasing agents, buyers, pay, national survey, 2507
 Purification of boron, *see* Boron.
 Purification train produces ultrapure hydrogen gas, 9842
 Pushchino-on-the-Oka, Russian Soviet Federated Socialist Republic, automatic analysis of microscopic objects, conference, 1219
 Puthoff, Richard L., design study of regeneratively cooled nozzle for tungsten water-moderated nuclear rocket system, 2729
 Putnam, John F., standard terminology for instruction in school systems, 10942
 Putnam, Lawrence E.:
 effects of aft-fuselage-mounted nacelles on subsonic longitudinal aerodynamic characteristics of twin-turbojet airplane, 2730
 effects of probe antennas on aerodynamic characteristics of Apollo spacecraft, 12948
 hypersonic aerodynamic characteristics of wing-body configurations with canard controls, 2707
 Putzel, Henry, Jr.:
 official reports of Supreme Court, United States, preliminary print, 3652
 United States reports, cases adjudged in Supreme Court, 1645, 2941, 7201
 Pusak, P. P., metallurgical characteristics of high strength structural materials, 10014
 Pycnophorites, Public Health Service cooperative studies, conferences, proceedings, 17160.
 Pynnonen, Reino O., analysis of recent fatal accidents with front-end loaders, 16856
 Pyorrhea, *see* Periodontal disease.
 Pyraustidae, *see* Moths.
 Pyrethrum:
 synthesized—
 evaluation as protectant against insects in sorghum grain, in small bins, 11933
 shelled corn protectant against insects in small bins, 36
 Pyridoxine, methionine-pyridoxine mixture, response of individuals to airsickness, 77
 Pyrites, minerals yearbook chapter, 6692
 Pyroelectric detection techniques and materials, research program, 5159
 Pyroelectric radiation detectors, *see* Radiation detection instruments.
 Pyrolysis, wood, alpha-cellulose, and lignin, effect of inorganic salts, determined by dynamic thermogravimetry, 8103
 Pyrometers:
 obtaining surface temperatures of materials in presence of extraneous radiation, 16975
 radiometer-pyrometer, tech brief, 6769
 self balancing line-reversal, automatically measures gas temperatures, 15538
 Pyrometry, surface temperature measurements of opaque materials, 2649
 Pyrotechnics:
 military pyrotechnics series, engineering design handbooks—
 bibliography, 1750
 theory and application, 10252
 Pyruvates, anesthetized dog, hydrazine effect, 7359

Q

Qatar, foreign trade regulations, of Arabian Gulf States, 17480
 Quadrature approximations, abscissas and weights for Gaussian quadrature, 5284
 Quintance, Jean A., relief, 265
 Quaking aspen, *see* Aspen.
 Quality and pure price index, 8322
 Quality control:
 and reliability, handbook, 6154, 10902
 quality assurance program, storage/maintenance of industrial plant equipment, 18912

Quality control—Continued
 substance, quality assurance information handbook, 10887
 see also subjects.
 Quantitative analysis:
 atomic absorption spectrophotometry, modified method for determining uranium isotopes, 14368
 cesium-137 in irradiated nuclear fuel separation technique provides rapid quantitative determination, 12845
 production growth in Poland, 6482
 quantitative methods in sociology, USSR study, 12678
 quantitative methods of management, 11591
 Quantum effects in information transmission systems, 18037
 Quantum generators, *see* Lasers.
 Quantum mechanical study of molecules, 5131
 Quantum mechanics:
 Brownian motion as route to statistical mechanics and to quantum communication theory, 8597
 calculations of 2d virial coefficients for hydrogen, 8527
 Quarantine, plant, guard against pests for beautiful America, 1713
 see also subjects.
 Quarterly:
 NOTE:—For all publications which begin with the word "Quarterly", *see* subject, name of department, etc., issuing publication.
 Quarters:
 Military Academy, provide without charge to certain civilian instructors, etc.—
 law, 430
 report, 933
 Quartz:
 crystals detect gas contaminants during vacuum chamber evacuation, 14416
 latite, grades in compositionally zoned ash-flow sheet in southern Nevada, 1120
 radon gas, useful for medical purposes, safely fixed in quartz, 6695
 ternary diagrams of quartz-feldspar content of pegmatites in Colorado, 1111
 Quartz Creek mining district, composition of pegmatites, 1111
 Quasilinear differential equations, *see* Equations.
 Quate, Laurence W., revision of click beetles of genus *Melanotus* in America north of Mexico, 8545
 Quattlebaum, Charles, education and training enactments, 6121
 Queene Annes County, Md., soil survey report, 2874
 Queensland maple, *see* Maple.
 Quehanna pilot plant first generation process operations, 5777
 Questions and answers about eradicating hog cholera, 45
 Questions and answers, medical assistance, medical, 10972
 Questions and answers on Federal beautification and open-space land programs.
 Questions and answers on Golden Eagle passport and other Federal outdoor recreation fees, 7030
 Quick attach and release coupling assembly, self-aligning, self-sealing, 6789
 Quick facts on programs of Office of Economic Opportunity, 4693, 9384
 Quick look at hours worked under Fair labor standards act, as amended, 1966, 11598
 Quiet revolution, 12208, 12451
 Quigley, Hervey C., flight and simulator study of directional augmentation criteria for STOL airplane, 9890
 Quigley, Kenneth L., look at black walnut timber resources and industries, 8121

INDEX 1967

Quilleute Indians, judgment funds, disposition, law, 378
 Quimby, Freeman H., participation of Federal agencies in international scientific programs, 6044
 Quinacs, growing, general information, 5634
 Quinidine, prices, hearings, 16425
 Quinine, and quinidine, prices, hearings, 16425
 Quinn, Alonzo W., bedrock geology of Che-patchet quadrangle, 16685

R

R.E.A., *see* Rural Electrification Administration.
 R.N. Bert Dosh Lock, name, report, 885
 Raabe, R. G., mineral industry of North Dakota, 8360
 Raean, Helen P., indexes to Oak Ridge National Laboratory master analytical manual, 7428
 Rabbits:
 brain, neuron differentiation, USSR cytochemical study, 14221
 gamma radiation LD 50(30), 17347
 processing plants, chemical compounds authorized for use under USDA inspection programs, lists, 10878, 16445
 renal excretion of solutes in rabbits, effect of -70°C acceleration, 14776
 spermatozoa, electronic method for counting and sizing, 11954
 Rabin, William T., special benefits awarded to persons 72 years of age and older during last quarter of 1966, 10086
 Race problems:
 America's crucial lesson (address), 12463
 civil rights act of 1964, title 6, open every door, goal for nursing homes, 13183
 civil rights and race relations, seminar, 2879
 compliance officer's manual, procedures under title 6, civil rights act of 1964, 1906
 desegregation guidelines, do they go far enough?, 9398
 equality in education, remarks, 1006
 Federal role in urban affairs, hearings, 6111
 help for ghetto (address), 2484
 housing discrimination—
 legal and moral implications (statement), 13057
 Springfield-Holyoke-Chicopee metropolitan area, report, 4385
 prohibit discrimination in housing, education, etc., report, 4498
 prose, poetry and black power (address), 9407
 public schools, racial isolation, Civil Rights Commission report, 5918
 summary, 8982
 questions and answers on race relations, guide, 10913
 school desegregation—
 education parks, appraisal of plans, 14850
 educators must lead way (address), 1004
 guidelines, hearings, 4548
 nobody wanted, 15213
 plans, revised statement of policies, 2190
 policies and guidelines—
 investigation, hearing, 752
 select committee to study report, referring investigation to Judiciary Committee, 4559
 progress and problems (address), 4718
 schools can be desegregated, 14849
 Southern schools, 1966-67, study, 13436
 security, respect for the individual, and economic development to combat racial discrimination in city ghetto (remarks), 17841

Race problems—Continued
 urban ghetto, VISTA serves, 6168
 see also Discrimination in employment.
 Racketeering:
 labor, activities of Jack McCarthy, etc.,—
 hearings, 2119
 report, 10731
 Radar:
 continental defense system, phaseout of certain stations, agreement with Canada, 2932
 data—
 digital magnetic tape system for recording, 17096
 thunderstorms circulations and turbulence studies, 10966
 echoes, movement and predictability, 6220
 errata, 10964
 IFF, Hartlobe airborne dual antenna system Mark X (SIF) system, 8587
 observation of planets, USSR study, 1242
 optical radar measurement of atmosphere, 8420
 publications, price list, 1562
 pulse coding system for clutter suppression, analysis, 10018
 addendum, 14596
 radar in meteorology, USSR study, 8260
 Randle Cliff radar digital range-measuring instrument, 18114
 reflections, NRL terrain clutter study phase 1, 14591
 rendezvous, advanced antenna techniques, study, 11403
 weather radar manual—
 fundamentals and applications, 17294
 national network observing and reporting procedures, 17293
 see also Doppler radar—Monopulse radar.
 Radar display systems, weather radars & remote displays, Federal plan, 15232
 Radar targets, ambiguity function independent of assumptions about bandwidth and carrier frequency, 8598
 Radar tracking, meeting movements problem, USSR study, 15427
 Radar, Charles A., colloidal asbestos fibrils as reinforcements for polymeric structures, 16914
 Radial displacements, *see* Displacements.
 Radial flow, *see* Flow.
 Radial-flow fans, *see* Mechanical fans.
 Radial furnace shows promise for growing straight boron carbide whiskers, 9836
 Radial saws, *see* Saws.
 Radiant energy, transport in nongray, non-scattering gases, approximation, 11544
 Radiation:
 biochemistry, role of Bulgarian scientists, 1159
 biological effectiveness of various types, USSR study, 5032
 biological effects, 5434
 cloud cover and out-going, investigation with satellite Kosmos-122, USSR study, 2443
 CN violet, behind shock waves in air contaminated with carbon-bearing compounds, analysis models, 9905
 cosmic, investigation by artificial satellite Luna-10, USSR, 1282
 counting technique allows density measurement of metals in extreme environments, 17922
 cyclic incident, use for measuring absorbance and emittance, 6792
 cylinder through plasma sheath, 5176
 damage, pharmacology and clinical use of mercaptoamines, USSR study, 8242
 design of shielded source for irradiation of natural animal populations, 1782
 dose from accelerator-produced radiation, biological interpretation, symposium proceedings, 15960

Radiation—Continued

- effects—
 - film-boiling heat transfer from flat plate, 14453
 - kinetic properties of thermal decomposition of $KMnO_4$, result of CO^{60} irradiation, 11570
 - life processes, bibliography, indexes, 13343
 - microbial flora surviving irradiation pasteurization of seafoods, 1800
 - relay I experiment, 1482
- electron irradiation effects from 20 KeV to 1 MeV on polyethylene terephthalate capacitor-type meteoroid detector, 1491
- embrittlement of Army SM-1A reactor pressure vessel, projected estimates, neutron spectral effects, 1554
- Enrico Fermi reactor, use for irradiation testing, hearing, 1972
- environmental surveillance, 10048
- extraneous, obtaining surface temperatures of materials in its presence, 16975
- fallout radiation shielding, 14847
- food irradiation—
 - checklist of cost considerations (address), 5807
 - food products, installation for, USSR study, 9663
 - preservation, developing technology (remarks), 4242
 - preservation of food, conference, 13318
 - preservation of fresh-water fish and inland fruits and vegetables, 1784
 - preservation, symposium, 1783
 - program, review, hearing, 1975
 - selected products in Atomic Energy Commission's low-dose program, cost-benefit study, 10302
 - 6th annual AEC contractors' meeting, 5768
- hazards, guidance for control, in uranium mining, 17761
- high intensity—
 - heat source capable of sustained operation, 5215
 - radiation dosimetry measured with SEMIRAD (secondary-electron mixed-radiation dosimeters), 4219A
- irradiation—
 - charge storage effects in mylar from electrons, 2610
 - high-temperature, and carbonization of coal, products from, comparison, 2572
 - tensile yield strength using least number of specimens, simplified method measures changes, 16879
 - thyroid irradiation, pathological effects, 11629
- isotopes and radiation technology, quarterly technical progress review, 3449
- Japanese Association for Radiation Research on Polymers, annual report, 5758
- later somatic effects, 10308
- mass transfer by sublimation from snow-surface subjected to irradiation, 4198
- microbial inhibition systems employing radiation (MISER), 8908
- monitoring, programmed instruction book, 15973
- nuclear and X-ray, use in helicopter close-order formation keeping system, final report, 5771
- nuclear, used to investigate mechanisms of superconductivity, 9830
- optical radiations and water vapor, effect on trapping spectrum sulfide, 14455
- pasteurization—
 - Gulf shellfish, 13341
 - Pacific crab and flounder, 13348
- processed wood-plastic composites, industrial evaluation, 5780
- radiation heat transfer, heat-and mass-transfer characteristics of nuclear rocket employing, 14497

Radiation—Continued

- radiation transport and biological effects, special sessions, proceedings, 13314
- reactions to bacterial antigens after irradiation, USSR study, 9665
- safe structures, construction investigated, USSR study, 6523
- safety considerations in preparation of license applications, 15957
- secondary, in radiographic inspection, method prevents, 17998
- sensitivity of structural steels, metallurgical variables as possible factors controlling, initial evaluations, 5357
- separation technique provides rapid quantitative determination of cesium-137 in irradiated nuclear fuel, 12845
- shielding—
 - applied to nuclear defense planning, analysis and design principles, 4384
 - from fallout gamma radiation, designing shelter in new buildings, 7530
- shipboard irradiator studies, annual report, 5791
- shock-layer, from molecular band systems in proposed planetary atmospheres, predictions, 6890
- situation, Beloyarskaya atomic electric power station area, USSR, 15406
- soft corpuscular study by lunar satellite Luna-10, USSR, 1283
- source arrangement for low-exposure-rate total-body irradiation facility for man, 13338
- space radiation biology, 10317
- space radiation equivalence for permanent damage to transistors, 14380
- spatial distribution of reactor radiation around horizontal channel of RA reactor, at Vinca, Yugoslavian study, 6479
- spatially extended sources, point-source detection system rejects target, 6784
- spectral energy distribution of unfiltered X-rays from 250 kV constant potential machine, 1789
- techniques, radiochemical analysis, 2746
- technology, basic studies, 8905
- technology, postharvest procedures as means of extending shelf life of fruits and vegetables, 5792
- TIROS VII data, synoptic world weather analysis, 12922
- transient, and conduction in slotted slab and hollow cylinder, 17941
- ultralow frequency, radiation at 2 conjugate points, USSR study, 4953
- your body and radiation, 7445
- see also Alpha particles—Beta rays—Black body—Bremsstrahlung radiation—Gamma rays—Heat transfer—Infrared rays—Ionizing radiation—Radiation detection instruments—Radioactivity—Spectra—Thermal radiation—Ultraviolet rays.
- Radiation biology, see Radiobiology.
- Radiation Center, Oregon State University, dedication (remarks), 17407
- Radiation detection instruments:
 - pyroelectric detection techniques and materials, 5159
 - scintillation survey meter, point source detection, 1787
- see also Dosimeters—Proportional counters.
- Radiation environment, see Environment.
- Radiation illness, prophylaxis and treatment, problems, Rumanian study, 4931
- Radiation monitoring:
 - film badge services, standards of performance, 10647
 - personal monitoring, comparison of thermoluminescent dosimetry systems with film badges, 8599

INDEX 1967

- Radiation Physics Laboratory, National Bureau of Standards, general information, 2741
- Radiation sickness, *see* Radiation illness.
- Radiation target cans, irradiation capsule technology developments, international symposium, 8903
- Radiative capture, *see* Neutron radiative capture.
- Radiators, cast-iron, standard of trade, 1524
- Radiators (aircraft):
 - diode-iris controlled waveguide slot radiators, feasibility study, 9812
 - finned, internally and externally, for Brayton cycles in space, exploratory study, 8405
 - multitube, centrally finned, potassium condensing radiator, experimental steady-state performance, 18052
 - straight-finned, weight optimization, design procedure, 6781
- Radicals, *see* Free radicals.
- Radio:
 - publications, price list, 1562
 - radio science (periodical), 3803
 - radio science, journal of research, National Bureau of Standards, 2736
 - world atlas of atmospheric radio refractivity, 4747
- Radio announcements, examination announcement, 7537
- Radio apparatus and appliances:
 - AN/GRC-27A radio, electronics technician trainee's guide, 11666
 - AN/SRC-20, AN/SRC-21 radio sets, electronics technicians trainee's guide, 8582
 - commercial two-way equipment, savings available by purchasing rather than leasing, Defense Dept., GAO report, 4882
 - see also* name of apparatus or appliance.
- Radio astronomy, radiometric boreighting by sequential lobing, 18055
- Radio broadcast technicians, examination announcement, 7537
- Radio broadcasting:
 - agreement with Mexico, 11852
 - applications, FCC, 8269
 - broadcast actions, reports, 3269
 - call signs, new or modified, FCC reports, 3269
 - emergency broadcast system, basic plan, 14016, 17450
 - experimental auxiliary, and special services, FCC rules and regulations, 3273
 - facilities, agreement with Philippines, 1638
 - public broadcasting act of 1967—
 - hearings, 10824, 13710
 - reports, 10756, 14980, 16245
 - services, FCC rules and regulations, 3273
 - Soviet materials on arms control and disarmament (periodical), 3888
 - weather aids—
 - Atlantic and Mediterranean area, 1540, 9975, 14581
 - Pacific and Indian Oceans area, 2772, 8573, 11648, 17076
 - see also* Radio stations.
- Radio chemistry, *see* Radiochemistry.
- Radio communication:
 - amateur radio service, FCC rules and regulations, 3276, 4761
 - amateur stations, communications on behalf of 3d parties, agreement with—
 - Argentina, 18152
 - Uruguay, 5545
 - applications, FCC, 3269
 - aviation, public safety, industrial, and land transportation services, FCC rules and regulations, 3275
 - Brownian motion as route to statistical mechanics and to quantum communication theory, 8597
 - citizens radio service, FCC rules and regulations, 3276, 4761
 - Radio communication—Continued
 - deep and/or rapid fading phenomena in strictly line-of-sight UHF/SHF propagation, 6225
 - disaster communications service, FCC rules and regulations, 4761
 - domestic, public services, FCC rules and regulations, 3277
 - experimental services, FCC rules and regulations, 3272
 - fading statistics on 212-km line-of-sight overwater radio path at 1760 MHz, 6224
 - FM modulation of CW laser beam, 6710
 - industrial, scientific, and medical services, FCC rules and regulations, 3272
 - international fixed public services, FCC rules and regulations, 3277
 - line-of-sight systems, CC TM technical manual, 7377
 - partial revision of radio regulations, Geneva 1959, with additional protocol—
 - report, 13726
 - text, 7772
 - predictions and projections of election results, effects—
 - hearings, 16400
 - report, 15143
 - safety and special radio services, FCC applications and actions, 3269
 - selection of optimal working frequencies, Soviet research, 6518
 - treaty matters, FCC rules and regulations, 3272
 - tropospheric radio duct meteorology at VHF and UHF in theory and as observed on trip around world, 1551
 - Radio direction finding, principles, USSR study, 6577
 - Radio engineering:
 - engineering-installation standards manual, 4667
 - line-of-sight systems, CC TM technical manual, 7377
 - Radio equipment, *see* Radio apparatus and appliances.
 - Radio frequencies:
 - allocations, FCC rules and regulations, 3272
 - devices, FCC rules and regulations, 3272
 - high frequency ionospheric telecommunications systems, statistical performances, indexes, predicting, 2228
 - induction heating of low-pressure plasmas, 18035
 - management, Army field manual, 1759
 - mechanical device accurately measures RF phase differences in VHF or UHF ranges, 6848
 - optimal working communication, Soviet research, 6518
 - standard services provided by NBS stations WWV, WWVH, WWVB, and WWVL, 12979
 - Radio frequency modulation:
 - FM modulation of CW laser beam, 6710
 - maximum utilization of FM subcarrier bandwidth, 9992
 - threshold reduction techniques study, 6716
 - Radio in navigation:
 - aids—
 - Atlantic and Mediterranean area, 5336, 9974, 11646, 14580, 18102
 - Pacific and Indian Oceans area, 7006, 11647, 17075
 - Radio operators:
 - amateur, alien, agreement authorizing operation in U.S. and—
 - Argentina, 18151
 - El Salvador, 17242
 - France, 2897
 - Honduras, 15778
 - Kuwait, 2901
 - Netherlands, 8740

Radio operators—Continued
 amateur, alien—continued
 New Zealand, 17232
 Nicaragua, 7159
 Norway, 15784
 Panama, 7188
 Switzerland, 15776
 Trinidad and Tobago, 15774
 commercial, FCC rules and regulations, 3271
 radioman 1 & C, Navy training course, 7022
 radiotelephone 3d class operator permit, examination, study guide and reference material, 4762
 transmitter and receiver, examination announcement, 7537
 Radio programs, *see* Radio broadcasting.
 Radio propagation, *see* Radio waves.
 Radio ranges, *see* Omniranges.
 Radio receivers, *see* Receivers (radio).
 Radio reflectors, gratings and networks of aluminum ribbons as radio reflectors, 16902
 Radio services, *see* Radio communication.
 Radio sets, *see* Radio apparatus and appliances.
 Radio signals:
 antipodal region of radio station NPM, Hawaii, airborne field measurements, results, 5345
 attenuation data, deduction of reentry plasma properties about manned orbital spacecraft, 14494
 cross modulation in Scamp signal processor, 9990
 earth's magnetic field influence on back-scattered signal, computations, USSR study, 6575
 overwater radio path at 1760 MHz, fading statistics on 212-km line-of-sight, 6224
 PM or FM, threshold reduction techniques study, 6716
 Radio Standards Laboratory, general information, 18078
 Radio stations:
 amateur—
 alien, agreement authorizing to operate in U.S. and
 Argentina, 13151
 El Salvador, 17242
 France, 2897
 Honduras, 15773
 Kuwait, 2901
 Netherlands, 8740
 New Zealand, 17232
 Nicaragua, 7159
 Norway, 15784
 Panama, 7188
 Switzerland, 15776
 Trinidad and Tobago, 15774
 communications on behalf of 3d parties, agreement with—
 Argentina, 13152
 Uruguay, 5545
 permit operation by participants in 1967 Boy Scout world jamboree—
 law, 13538
 reports, 12368, 13665
 field relay techniques, Army field manual, 5729
 maritime services on land, shipboard, etc., FCC rules and regulations, 3274
 NPM, Hawaii, antipodal region, airborne field measurements results, 5345
 observing and interpreting results of studying fields of radio broadcasting stations, method, 9625
 require furnishing of free time to candidates for public office, hearings, 16400
 telecommunication, pre-sunrise operation of certain standard (AM) radio broadcasting stations, agreement with Canada, 15780

Radio stations—Continued
 WWV, WWVH, WWVB, WWVL, standard frequency and time services provided by NBS, 12979
 Radio telephone operators, *see* Radio operators.
 Radio telescopes:
 construction of new radiotelescope completed at Serpukhov, USSR article, 8255
 effects of atmosphere on characteristics of maximum-size radiotelescopes, USSR study, 5012
 orbiting, 1500-meter, feasibility, 11414
 Radio-TV packet, FDA (periodical), 3804
 Radio waves:
 continuous wave detector has wide frequency range, 17994
 diffraction, vector integral equation, 7935
 propagation—
 antipodal region of radio station NPM, Hawaii, airborne field measurements, results, 5345
 at 5 GHz in Europe, comparison of predictions and measurements for various types of paths, 6223
 in earth-ionosphere waveguide channel, long and superlong, 18783
 line of sight UHF/SHF, deep and/or rapid fading phenomena aspects, 6225
 short-range radio prediction services, USSR manual, 14237
 UHF, in troposphere, 6508
 USSR studies, 4939, 9649
 tropospheric radio duct meteorology at VHF and UHF in theory and as observed on trip around world, 1551
 Radioactivation analysis:
 activation analysis, report, 2746
 automated activation analysis, 5785
 charged particle activation analysis, 1793
 neutron activation analysis traces copper artifacts to geographical point of origin, 8388
 Radioactive pebble bed chemical reactor system, *see* Reactors (atomic).
 Radioactive substances:
 low-level radioactive waste containers in accident environment, investigation, 8909
 radioactive materials, international traffic, 7432
 see also names of radioactive minerals, etc.
 Radioactive waste disposal:
 International Atomic Energy Agency symposium, 16747
 porous permeable rock for nuclear waste disposal, 9778
 problem unsolved, Hungarian study, 12708
 processing, annotated bibliography of selected literature, 5786
 solidification and long-term storage, symposium, proceedings, 5767
 transport and disposal procedures, survey, 8909
 Radioactivity:
 AEC fallout program, quarterly summary report, appendix, 10300
 airborne, USAEC radiometric reconnaissance, maps—
 Arizona, California, Nevada, and New Mexico, 1801
 Arkansas, Colorado, Montana, Texas, and Utah, 1802
 South Dakota and Wyoming, 1803
 artificial, reference horizons in Greenland firm, 4197
 automatic sampler for collecting radioactive particulates in ground level air, 1788
 Cluj city area, Rumania, effects on vegetation, studies, 1299
 contamination, radiotoxicological aspects, Rumanian study, 2464
 fallout—
 characteristics from deeply buried nuclear detonation, 7426

INDEX 1967

Radioactivity—Continued

- fallout—continued
 - distribution, characteristics, and biotic availability, Operation Plumbbob, 1812
 - Health and Safety Laboratory program quarterly summary reports, 1785-86, 5774-75, 16058, 13324-25
 - measurement on to high polar ice sheets Antarctic and Greenland cores, 17374
 - northern regions, 14794
 - protected schools, pictorial reviews, 5917, 16058
 - underground explosion, condition of formation, 1268
- fallout shelters—
 - architectural, engineering, and consulting firms with certified analysts, directory, 13424
 - dual-purpose designs receiving awards in Brooklyn competition, 7529
 - how are labor union members affected, 4383
 - HUD aids for shelters, 12625
 - improving protection in home basements, evaluating techniques, 5765
 - management handbook, 5916
 - national design competition, community center, awards, 16060
 - national survey, instructions, 15226
 - nuclear defense design for architects and engineers courses, announcement, 16053
 - policy resolutions of AFL-CIO, 1903, 17452
 - programmed orientation to civil defense, 13430
 - protection for homes with basements, handbook, 13425
 - shelter design and analysis, radiation shielding, 14847
 - shelter management, textbooks, 16057
 - filter pack technique for classifying radioactive aerosols by particle size, final report, 10017
 - method for determination of surface areas, 6702
 - natural environment radioactivity from radon 22, 17140
 - nuclear facilities, routine surveillance, report, 7065
 - pneumatic insulation suit for protection, USSR study, 14231
 - upper atmosphere, sampling by means of balloons agreements with Australia, 2923, 5538
- Radioassaying, procedures for environmental samples, 11725
- Radiobiology (periodical) : translation, 7418
- Radiobiology :
 - bibliographies, subject and author indexes, 13343
 - biological effects of space proton environment, estimate, 4176
 - biological interpretation of dose from accelerator-produced radiation, symposium proceedings, 15960
 - conference proceedings, 7075
 - mechanism of action of AET, protection of DNA against ionizing radiation by GED, 5713
 - problem, USSR study, 8258
 - protons effects on primates, 4179
 - radiation biology conference, proceedings, 15958
 - USSR periodical, translations, 4231-33, 7418
- Radiochemical analysis :
 - activation analysis, instrumentation, radiation techniques, and radioisotope techniques, 2746
 - radiochemical analysis of water (series), 1130, 6410
- Radiochemical Analysis Division, annual progress report, 2746

Radiochemistry :

- industrial radiation chemistry in Hungary, 14266
- plutonium, 126
- techniques—
 - activation analysis with charged particles, 1793
 - chemical yield determinations, 13331
- Radiography :
 - industrial, AEC licensing guide, 15957
 - inspection, method prevents secondary radiation, 17998
 - radiographic pattern, brightly visible, provided by thermal neutron image intensifier tube, 17921
 - requirements for cobalt-chromium alloy liners for small arms barrels, military standard, 9378
 - X-ray photos, digital computer processing, 6741
- Radioisotope submersible engine, conceptual design, final report, 5760
- Radioisotopes, *see* Isotopes.
- Radiological defense, planning and operations guide, 7528
- Radiological health, *see* Health.
- Radiological Health Division, scientific information retrieval system for research grants, 7064
- Radiological Research Laboratory, Columbia University, annual report on research project, 12009
- Radiological warfare, field CBR collective protection, Army technical manual, 5740
- Radiology :
 - dose calculations following reactor accident, fission product nuclides identification, 13349
 - radiological countermeasures ashore, 17068
 - radiological health data and reports (periodical), 3805
- Radiomen, *see* Radio operators.
- Radiometers :
 - calibration, modified blackbody device, 17995
 - radiometer-pyrometer, tech brief, 6769
 - technique for absolute temperature measurement at microwave frequencies, 17016
- Radiometric boresighting by sequential lobing, 18055
- Radiometry :
 - USAEC airborne reconnaissance, maps—Arizona, California, Nevada, and New Mexico, 1801
 - Arkansas, Colorado, Montana, Texas, and Utah, 1802
 - South Dakota and Wyoming, 1803
- Radiosondes :
 - fission product nuclides, for radiological dose calculations following reactor accident, identification, 13349
 - standardization, bibliography, 15682
- Radios, *see* Receivers (radio).
- Radiosondes :
 - code, manual, 18253
 - dew point accuracies 40° C to -40° C, 15884
 - paper, 6913
- Radiotelescopes, *see* Radio telescopes.
- Radiotherapy, conference proceedings, 7075
- Radiotracer propellant gases, exploratory development, final report, 12016
- Radium, New Jersey cases, epidemiological follow-up, progress report, 10301
- Radon :
 - gas, useful for medical purposes, safely fixed in quartz, 6695
 - natural environmental radioactivity from radon 22, 17140
 - waters and their therapeutic uses, USSR study, 8241

Radwan, M. A., absorption and distribution of C¹⁴ labeled tetramine in relation to its possible use in animal damage control, 4851

Rafters, trussed, joints, moisture cycling, 8101

Ragsdale, Robert G.:
heat- and mass-transfer characteristics of axial-flow liquid-core nuclear rocket employing radiation heat transfer, 14497
radiant-heat-transfer liquid-core nuclear rocket engine, 18016

Ragweed, eradication, hearings, 16303

Ralch, Peter C., artificial kidney bibliography, 11718

Railroad accidents:
all line-haul and switching and terminal companies, summaries, 3916, 12514
investigation reports, 11235
summary and analysis, bulletin, 8230

Railroad Adjustment Board, *see* National Railroad Adjustment Board.

Railroad cars:
commuter, 5-year market forecast, 4261
equipment of class 1 railroads, 3587
heavier loading of watermelons, damage and cost reduction study, 10154
long travel shock mounts, rail impact testing, 14805
maintenance, Army technical manual, change, 5891

Railroad employees:
benefits for railroad workers and their families, 2846
dispute with railroads
extend period under railway labor act—
laws, 9040, 10482
message from the President, 10511
reports, 9112, 9279, 10567, 10736
negotiations to ward off strike, etc., message from the President, 9074
settlement—
hearings, 10660, 10868
law, 13534
reports, 12259, 12267, 12364, 13667
status of negotiations, hearing, 9328
summary of situation, etc., message from the President, 10514
hours of service act of 1907, amend to reduce 16-hour limitation for certain employees, hearings, 4634
railway labor act, text, 5393
retirement act of 1937, etc.—
amend to provide supplemental annuities, etc., law, 413
amend to provide survivors benefits for children, age 18-21, law, 414
annuities under, adjustments, law, 414
retirement and unemployment insurance act, text as amended, 1992, 15719
retirement beneficiaries who receive social security payments, message about medicare, 15739
wage statistics, class 1 railroads, 4042

Railroad retirement act, *see* Railroad employees.

Railroad Retirement Board:
appropriations, 1967, law, 491
appropriations, 1968—
hearings, 9144, 13841
reports, 10612, 15082
monthly review, 3579
report, 1966—
departmental edition, 10072
document edition, 9053

Railroad Safety and Service Bureau, Railroad Safety Section and Locomotive Inspection Section annual report, 11239

Railroad Safety Section, annual report, 11239

Railroad supplies, Federal item identification guides for supply cataloging, supplements, 3285

Railroads:
carload unit costs by territories, 11237
carload waybill statistics, 1964—
mileage distribution by type of car, 6472

Railroads—Continued
carload waybill statistics, 1964—con.
territorial distribution by type of car, 8231
traffic and revenue, territorial distribution by commodity classes, 6473
weight distribution by type of car, 8232

carload waybill statistics 1964-65, supplement, 8235

carriers, emergency board report, 9415

chemical methods of controlling vegetation on railroad beds, USSR study, 12704

class 1—
freight commodity statistics, annual report, 12656
income and balance-sheet items, 3865
 motive power and car equipment, 3587
operating revenues and expenses, 3656
revenue traffic statistics, 3832
train and yard service, 3943

computer engineering in transportation, USSR study, 1173

construction, emergency, Army technical manual, 10278

first transcontinental, medal in honor of 100th anniversary of completion, report, 13522

freight service costs, formula for use in determining, 4926

interstate commerce act, amend, hearings, 12304, 17645

James Milholland and early railroad engineering, 11602

labor-management dispute—
extend period of no change under railway labor act—
laws, 9040, 10482
message from the President, 10511
reports, 9112, 9279, 10567, 10736
negotiations to ward off strike, etc., message from the President, 9074
settlement—
hearings, 10660, 10868
law, 13534
reports, 12259, 12267, 12364, 13667
status of negotiations, hearing, 9328
summary of situation, etc., message from the President, 10514

large—
operating revenues and expenses, 3657
operating statistics, 3658
lessors and proprietary companies, 1963
transport statistics, 8236
meteorological servicing of railroad transportation, USSR study, 1182

passenger train—
abandonment, hearings, 12304
discontinuances, hearings, 948, 13854
post offices, potential savings available in manpower costs, GAO report, 6377
private car lines, 1965 transport statistics, 4929

revenue contribution by commodity and territory, developing, 8234

schedule of annual indices, revised pages, 16728
see also Railroad employees.

Rails (birds):
hunting, possession, transportation, importation in Alaska, 1967-68, Federal regulations governing, 14061

Railway Employees' Department, AFL-CIO, emergency board report, 9415

Railway Express Agency, Inc.:
motor carrier accident, 6476
1965 transport statistics, 8236

Railway labor act, *see* Railroad employees.

Railways, *see* Railroads.

Rain:
daily river and rainfall bulletin, Shreveport, La., area, 3179
elevation effects on rainfall near Hollis, Alaska, 16655
frequency distribution of rainfall in tropical storms, U.S. Gulf Coast (paper), 5593

INDEX 1967

Rain—Continued

Hawaii, rainfall and streamflow from small tree-covered and fern-covered and burned watersheds, 8115

tropical cyclone rainfall, effects on distribution of precipitation over eastern and southern United States, 15230
see also Precipitation.

Rainbow Bridge National Monument, general information, 6984

Rainfall, *see* Rain.

Rainier (ocean survey ship) :

launching (remarks), 7583

Rainier, Mount :

aircraft accident, 7516

primary microbiological succession on

landslide of Alpine origin, 11119

volcanic hazards, 9562

Rainy Lake, area, Chippewa Indians land tenure at beginning of 19th century, 6974

Raising livestock on small farms, 1692

Raisins, malathion-treated drying trays, use to protect raisins from insects during drying and storage, 15859

Rajan, K. S., application of inorganic ion-exchange membranes to electroanalysis, 8214

Raleigh, N.C., area wage survey, 2504

Ralles, Homer A., low-level aircraft operational hazards, 4223

Ralls, Jack W., composition and flavor modification of processed peas, 11917

Ralston Buttes district, Colorado, geology and uranium deposits, 15308

Ramey, James T. :

policy considerations in desalting and energy development and utilization, 15969

remarks—

May 2, 1967, 8919

May 25, 1967, 10313

Ramjets and rocket-ramjet hybrid engines, nonconstant area combustion and mixing, analysis, 1478

Ramler, James E., low-thrust orbit raising in continuous sunlight while thrusting in plane perpendicular to earth-sun line, 15567

Ramsonde equation, *see* Equations.

Ramos Izquierdo, Angel R., *see* Reaud, Angel.

Rampart project, and Alaska natural resources, 12636

Ramseler, René O. :

role of sintering in snow construction, 15930

sintering process in snow, 10257

Ramsey, Jerry W., surface area studies of anthracite by carbon dioxide adsorption, 1412

Ramseyer rule print of act to grant consent of Congress to acceptance of certain gifts and decorations from foreign governments, 734

Ramseyer rule print of foreign assistance act of 1966, 733

Ramseyer rule print of foreign assistance act of 1967, 10652

Ran Lim Ai, *see* Lim Ai Ran.

Ran Lim Soo, *see* Lim Soo Ran.

Ranches :

increasing income through grazing associations, 1717

prospector, cowhand, and sodbuster, historic places associated with ranching etc., in Trans-Mississippi West frontier, 13008

Rand, A. Stanley, ecology and social organization in iguanid lizard, 15602

Rand, Robert L. :

addresses, etc.—

Apr. 12, 1967, 7961

Oct. 23, 1967, 17755

Randall, Carl, foreign trade regulations of Chile, 17482

Randall, D. L., tropospheric radio duct meteorology at VHF and UHF in theory and as observed on trip around world, 1551

Randle Cliff radar digital range-measuring instrument, 18114

Randolph County, Ala., soil survey report, 18215

Randolph County, W. Va. :

coal, preparation characteristics, 2578

soil survey report, 11812

Random excitation, *see* Noise.

Random integer dispenser, 14116

Random processes, *see* Probabilities (mathematics).

Randomness (mathematics) :

generating random information for experimental decision problems, 4225

nonparametric tests for randomness in sequences, 5248

Raney nickel, *see* Nickel.

Range finders, automatic, probability of target lock-on during search, USSR study, 11283

Range lands :

and related grazing lands, national handbook, 15745

Blue Mountains summer range, fluctuations in forage quality, 16663

cattle diets on native and seeded ranges in ponderosa pine zone of Colorado, 6369

chemical control of range weeds, 4102

establishing grass range in southwest Missouri Ozarks, 14092

forage and range research, challenges, 14753

locating pairs of comparable study areas, new system developed, 11121

Northwest range-plant symbols, list, 14141

ponderosa pine-bunchgrass range in Colorado, cattle grazing effects, 14764

range research, progress in 17 western States, 6136

Santa Rita Experimental Range, center for research on improvement and management of semidesert rangelands, 2331

western range and livestock, monthly report, 4062

Range-management specialists, seasonal employment information, 2524

Ranger 'rithmetic, 2293-96, 4825, 11108

Rankin, B. Kirk, III, grammar for component combination in Chinese characters, 5289

Rankine cycles :

Dowtherm A, technology, final report, 5761

space power systems, electrical component technology, design studies, 15964-965, 17399

space 3-loop powerplant, steady-state and dynamic operating characteristics, 2603

Ransom, Kerry E., convey property to, 10528, 17630

Ransom, William M., convey property to, 10528, 17630

Ransom County, N. Dak., soil survey report, 8702

Rantz, S. E., surface-water hydrology of California coastal basins between San Francisco Bay and Eel River, 15315

Raphael, Pedro, relief, 289

Rapid City, S. Dak., air transportation facilities (remarks), 12097

Rapid transit, *see* Local transit.

Rappahannock River :

Salem Church Reservoir, engineer report—departmental edition, 15227

document edition, 15056

Rappaport, Donald F., soil survey of Wood County, Ohio, 5517

Rapton, Avra :

seasonal work patterns of hired farm working force, 984

supplement, 9387

Rare earths:
additions on plain-carbon steel, effects, 6686
materials, disposal from national and supplemental stockpiles, report, 14937
minerals and metals, minerals yearbook chapter, 5123
northern New Jersey, potential resources, 6674

Rasch, A. A., medical ethics and research, 18247

Raspberries:
diseases, description, control, etc., 1681
growing, types, planting sites, etc., 4105
Rastars, optical instruments, USSR, 6505
Ratajczak, Anthony F., solar-cell space power systems using spectral dispersion, 15579
Ratcliffe, Brenda, urban research study centers, directory, 14919
Rates, see Air carriers—Electricity—Freight rates.

Rating scales:
development of benchmark jobs for Air Force officer position evaluation, 5705
psychiatric, handbook, 1573

Ratings:
advancement in rate or rating, manual, Navy, 7019
change, 18107
Coast Guard, enlisted ratings qualifications manual, 14876
Navy training publications for advancement, 11667

Rations:
breakdown point operations, Army technical manual, 15948
combat meals, rigging typical supply load for high velocity airdrop, 8889

Ratliff, Raymond D., locating pairs of comparable study areas, new system developed, 11121

Rats:
behavioral changes at ground level following gestation and growth in 100% oxygen at reduced pressures, 15899
born and raised in low-pressure pure oxygen environment, energy metabolism, 5709
control and extermination, Federal assistance hearings, 10641
cystic lymphadenopathy due to Rous sarcoma virus, pathogenesis, USSR study, 6554
erythrocytes changes in rats trained to hypoxia, USSR study, 4985
extermination act of 1967, reports, 12284, 13676
nitrogen metabolism in brain under impulse accelerations, USSR study, 1167
oxygen environment, long-term effects at 210 mm. Hg absolute, 1740
plasma, effects of ionizing radiation on amino compounds concentration, 5714
urinary creatinine excretion as index of fat-free mass composition, 7415
white, prophylaxis against poisoning with sarin, Bulgarian study, 6544

Ratte, James C., ash flows and related volcanic rocks associated with Creede caldera San Juan Mountains, Colo., 8166

Rauner, R. M., lecture, Apr. 5-7, 1967, 7870

Ravalli National Wildlife Refuge, birds, list, 11084

Raw materials:
industrial—
now and in the future (address), 10333
supply outlook (remarks), 10334
program, AEC authorizing legislation, 1968, hearings, 10491

Ray, Hilary A., jr., Gemini escape system, development and qualification, 12945

Raymond Educational Foundation, lands in Coconino County, Ariz., conveyance to, 10525

Rayner, Pearl C., price developments, 14304

REA, see Rural Electrification Administration.

REA bulletins, 1597, 7105, 10074, 17189-190, 18200

Reaction wheels, minimum energy, control for satellite scanning celestial area, 9899

Reactor fuel elements, solutions, analysis, 13333

Reactor fuel rods, UO₂ fuel systems for water reactor applications, development and testing, 8902

Reactor fuels:
cermet fuel materials, estimating thermal conductivity, 8502
development programs, summaries, 1804, 4238
dispersed particles in beryllium oxide matrix, status of development, 7421
fluid-bed fluoride volatility process recovers uranium from spent uranium alloy fuels, 9793
nuclear, irradiated, cesium-137 in, separation technique provides rapid quantitative determination, 12845
plutonium, used as nuclear fuel, determining price, USSR study, 15373
processing, quarterly technical progress review, 3806
radiant heat transfer in fuel region of gaseous nuclear rocket engine, 5183
radioisotope submersible engines, fuel specification, 1777
reactor burnable poisons, nondestructive analysis, evaluation of thermal neutron capture gamma ray techniques, 1790
reactor energy release by nonuniform fuel redistribution, experimental study, USSR, 1295
review of nuclear fuel requirements and resources (remarks), 10316
thorium, for heavy water organic cooled reactor, evaluation, 5764
three-dimensional calculation of fuel burn-up in water, cooled, water-moderated power reactors, 16740

Reactor safety, see Safety of Life.

Reactors (atomic):
accelerator-booster, fast, pulsed research, feasibility study, final report, 13322
Army SM-1A reactor pressure vessel, radiation embrittlement, projected estimates, neutron spectral effects, 1554
axial-flow liquid-core nuclear rocket employing radiation heat transfer, heat-and mass-transfer characteristics, 14497
boiling water reactors—
feasibility studies of nuclear steam supply systems with capacities up to 10,000 MWt, 17391
high power density BWR core-conceptual design, 7423

BONUS—
boiling nuclear superheater power station, final hazards summary report, 5784
core development program, final report, 8901
brazing tungsten for high temperature nuclear service in hydrogen, 11506
built, being built or planned, U.S., 1805, 5788, 15968

control systems—
based on counting and Campbell techniques, instrumentation program, 7422
with gaseous control system, 14485
development program, AEC authorizing legislation, 1968, hearings, 9041
Enrico Fermi, use for irradiation testing, hearing, 1972
experimental data and control, use of computers in analysis, 14808
fast breeder power development, world outlook (remarks), 10305
fast reactor program in United States, implications (remarks), 7441

INDEX 1967

- Reactors (atomic)—Continued**
fast, transient response and safety in selected accidents, 5772
Federal item identification guides for supply cataloging, supplements, 3288
gas-cooled, fast breeder, annual progress report, 7420
gaseous core, thermal absorption in seeded gases, 12866
gaseous nuclear rocket fuel temperatures, local and average estimates, 16998
heavy water organic cooled, thorium fuels, evaluation, 5764
high flux isotope reactor (HFIR), dedication (remarks), 1815
high-temperature reactor operation, problem, USSR, 14273
licensing and regulation, hearings, 12184
liquid sodium metal cooled fast breeder, fuels and materials summary report, 1811
loss-of-flow accident, computer program predicts thermal and flow transients, 17919
materials, quarterly technical progress review, 3807
mathematical theory of critical state of reactors, certain problems, USSR, 15357
neutron exposure to simulated pressure vessel wall of A 302-B steel, through-thickness notch ductility and tension properties, 17093
power—
formation of transuranium isotopes, 124
licensing, regulations, safeguards, 10309
power reactor technology, quarterly technical progress review, 3697
pressure vessel steels, neutron embrittlement, 5356
exposure criteria, 5355
prestressed concrete reactor vessel—
for boiling-water reactor, 13319
model 1, 13320
model 2, 13321
radioactive pebble bed chemical reactor system, development, 12011
reactor shielding physics, problems, 12972
research and training reactor IR-100, USSR study, 15354
research reactors, utilization, symposium, 1797
simulator for nonnuclear testing of space power systems, 14487
SM-2 research reactor, USSR operating experience, 4946
sodium-cooled—
fast, feasibility study, 1792, 5778
USSR studies, 6527
spatial distribution of reactor radiation around horizontal channel of RA reactor at Vinca, Yugoslavian study, 6479
superheaters, corrosion resistance of stainless steel and nickel alloys, 9797
three-dimensional calculation of fuel burn-up in water-cooled, water-moderated power reactors, 16740
tungsten-reactor rocket engine, mapping as guide to operation and control, 9876
UO₂ fuel systems for water applications, development and testing, 8902
VULCAN (digital computer depletion program), use with independent 1-dimensional spatial calculations, 16990
Zero Power Reactor I—
measurement of effective delayed neutron fraction, 2694
transport study of real and adjoint flux, 11535
Read, Ralph A.:
effect of gibberellic acid spray on seedlings of eastern redcedar, bur oak, and red oak, 11129
ten-year growth of 2 sources of large grade ponderosa pine transplants in Nebraska, 2312
Reader, Paul D., cathode durability tests in mercury electron-bombardment ion thrusters, 12960
Reader, T. D., research on non-destructive fluidic storage control device, 11409
Readers (optical characters), *see* Optical character reader.
Readers (tape):
tester automatically checks paper tape punch and reader after maintenance, 15537
Reading:
early training essential, USSR study, 16775
instruction, financial assistance guidelines under NDEA, 13956
national defense education act—
institutes for advanced study, summer 1967, handbook for directors, 1003
loans to private nonprofit elementary and secondary schools for equipment and materials, 1007
need to read and write, adult basic education leaflet, 10936
professional, guide for Navy and Marine Corps officers, 17079
text-workbook for success in Navy, 2778-79
recruit's day-to-day experiences, 2780
Reading machines, *see* Optical character reader.
Ready Reserve, *see* Reserve components of Armed Forces.
Reagan, John F., jr., relief, 770
Real estate:
American Academy in Rome, increase amount—
law, 16135
report, 14966
conveyance to Florida, hearing, 2042
District of Columbia unsafe improvements, limitation on civil actions for damages, amend code—
hearing, 17596
report, 16295
excess, GSA to assume care and handling functions, report, 13794
Federal surplus, for health, educational, and civil defense purposes, how to acquire, 12621
Government owned, in U.S. Territories, etc., inventory report, 4540
leased by U.S. throughout world, inventory report, 11160
leases by Post Office Dept., extend authority—
hearing, 7827, 9165
law, 10484
reports, 10562, 10726
living units, minimum property standards, interim revision, 6257
low cost housing, minimum property standards, 1137
minimum property standards—
housing for elderly and handicapped, 9582
low cost housing, 8201
multifamily housing, 11014-15
nursing homes, 8203
owned by U.S., throughout world, inventory report, 6386
property improvement loans, consumer bulletin, 8197
real property transferred by RFC to other Govt. departments, payment in lieu of taxes, extend—
law, 13531
reports, 10606, 13793
remove cloud on title to property owned by John Johnson, 10479, 10524, 12328
restoration of investment credit and accelerated depreciation allowance—
hearing, etc., 7764, 7844
law, 12168
legislative history, 13719
message from the President, 9063
reports, 7711, 7713, 9271, 10614

Real estate—Continued

- subdivisions sold through mails and in interstate commerce, prevent frauds, hearings, 17642
- title 1, property improvement loans, consumer bulletin, 6425
- see also Farms—Mortgages.
- Real property, see Real estate.
- Realistic uncertainties and mass measurement process, illustrated review, 15592
- Realities of the learning market, 9408
- Reapportionment, congressional redistricting standards, establish reports, 912, 9126, 10793, 13657, 17573
- Rear window defogger for automotive vehicles, Federal standard, 6332
- Reasoning, logic of scientific research, USSR study, 1298
- Reaud, Angel, relief, 10714, 16194
- Rebellion in Russia's Europe, fact and fiction, 12373
- Reboredo-Newhall, Alfredo, relief, 9194, 12211, 13477
- Recall (psychology):
 - arousal as factor in reminiscence, 9981
 - confidence in recall in paired-associate learning experiments, 13262
- Receipts and expenditures, see Finance.
- Receivers (radio):
 - home type and automobile, current industrial reports, 12072
 - change, 4323
- home-type radios, Federal item identification guides for supply cataloging, supplements, 3292
- superheterodyne, optical, uses laser for local oscillator, 6753
- tubes, temporary suspension of duty report, 2028
- Recipes:
 - beef and pork, 9344
 - beef and veal, 5630
 - cheese, 9335
 - corn grits, 9340
 - cornmeal, 10876
 - cracked wheat bulgur, 9341
 - desserts, Army technical manual, 8886
 - dry beans, 9348
 - dry split peas, 9346
 - eggs, 9350
 - fancy catfish, 8025
 - fish, 9347
 - fish & shellfish, quantity amounts, 15257
 - lamb in family meals, 17319
 - let's cook fish, complete guide to fish cookery, 9515
 - meat, canned, chopped, or luncheon, 9351
 - nonfat dry milk, 9336
 - peanut butter, 9345
 - potatoes in popular ways, 15851
 - poultry, 9349
 - quantity recipes for type A school lunches, 46
 - rice, 10875
 - rolled wheat, 9343
 - seafood, low-calorie, seafood slimmers, 8026
 - whole grain or enriched breads, 9342
- Reclamation Bureau:
 - appropriations, 1967, law, 403
 - appropriations, 1968—
 - hearings, 12287, 16393
 - report, 13678
 - bibliography, 8665
 - Engineering and Research Center in Denver, 11768
 - engineering research, 1965, annual report of progress, 11775
 - equal opportunity, affirmative program of manpower, utilization, 13104
 - irrigation operation and maintenance bulletin, 3448
 - laws affecting, chronological reprint, 1595
 - library accessions, 3504
 - press releases, 3757

Reclamation Bureau—Continued

- procedures for determining irrigation benefits, GAO review, 12590
- programs, briefing session, hearings, 10655
- publications available for sale, lists, 8668, 15720
- report, 1966, statistical appendix, 8669
- project data, 8670
- research reports, 7102, 10073, 11774-775, 17181
- safety news (periodical), 3811
- Reclamation era, quarterly periodical, 3810
- Reclamation of land:
 - feasibility of proposals, Interior Dept. to investigate, reports, 12362, 16240
 - Federal laws, chronological reprint, 1595
 - Federal projects, 1966, crop report, 17179
 - statistical appendix, 17180
 - making certain Federal reclamation and Indian irrigation project expenses non-reimbursable, report, 13836
 - reclamation project data, 1596
 - rehabilitation of strip and surface mining areas, special report, 14201
- small projects act amendments—
 - hearing, 13869
 - reports, 15081, 16233
- water measurement manual pertaining to measurement of water for irrigation projects, 11776
- water resource development proposals, feasibility investigations by Interior Dept. report, 2015
- Reclamation projects, see Reclamation of land—also names of projects.
- Recognition (psychology):
 - brain diseases effects on recognition capacities studied by engineers for use in computer development, USSR study, 6488
 - image recognition, USSR study, 9635
- Recombination reactions, carbon monoxide and atomic oxygen at high temperatures, 2718
- Reconnaissance (aerial):
 - radiometric, maps—
 - Arizona, California, Nevada, and New Mexico, 1801
 - Arkansas, Colorado, Montana, Texas, and Utah, 1802
 - South Dakota and Wyoming, 1803
- Reconnaissance (military), see Military information.
- Reconstruction, Alaska earthquake, Mar. 27, 1964, 8169
- Reconstruction Finance Corporation:
 - transfer of real property to other Govt. departments, payment in lieu of taxes, extend—
 - law, 13531
 - reports, 10606, 13793
- Record players, see Phonographs.
- Recorders, see Recording instruments.
- Recording employee injuries, 9714, 16805
- Recording instruments:
 - digital magnetic tape system for recording radar data, 17096
 - run numbering system enters data, 12918
 - strip chart recorder time notation, technique, 12912
 - ultrasonic spectrometer, sensitive recording NMR, 2744
- Recordings, see Sound recordings.
- Records:
 - career opportunities, State Department, world-wide assignments, 5524
 - computerized system, manipulating dates and time lapses, 72
 - documents in hands of expert, USSR study, 9624
 - employers, kept under fair labor standards act, 11899, 13179
 - Government departments, etc., disposition, reports, 705, 7695, 9102, 10553, 10577, 12260, 13628, 13649, 13677, 14958, 16241

INDEX 1967

Records—Continued

- groups in National Archives and Federal records centers, list, 17029
- intake and case recording, fact-finding report, Santa Clara County Welfare Department, San Jose, Calif., 10973
- livestock dealers, recordkeeping under packers and stockyards act, 44
- management and services, procedures, GAO guidance manual, 6874
- papers in Library of Congress—
 - Chambers, Washington Irving, 11340
 - Schurz, Carl, 8330
- production in legal proceedings, FAA regulations, 11004
- public health conference, proceedings, 11th national meeting, 18185
- retention requirements, guide, 7990
- salvage of fire and water damaged records, SBA, Minneapolis, Minn., 14165
- see also Military records—
 - names of departments, etc.—also subjects.
- Recreation :
 - boating guide, official Coast Guard basic principles, 219
 - errata sheet, 4419
 - classification, Library of Congress, 5086
 - equipment, Federal item identification guides for supply cataloging, supplements, 3292
 - facilities, development in national forests of California, personal history, 17799
 - Forest Service lands in United States, use estimation, 15284
 - land price escalation, report, 8603
 - outdoor—
 - and associated research needs for sub-urban forests, 7888
 - conservation and outdoor recreation (remarks), 13242
 - Federal areas, requiring entrance and user charges, 1967 directory, 13041
 - Federal, questions and answers on Golden Eagle passport and other fees, 7030
 - forest research, bibliography, 12568
 - Government cooperation in building more recreation areas (address), 13208
 - Government plans for greater developments near urban areas (remarks), 13238
 - grants-in-aid manual, 3665, 7026-28, 13037-40
 - Greenspan, crop land conversion, questions and answers, 11926
 - Greenspan grants to provide more space, general information, 5872
 - hazard from butt rot defect in lodgepole pine, 1093
 - inventory of mountain lakes and streams, aerial photo techniques, 14128
 - lighting, 10331
 - new potential for cooperation, 2230
 - outdoor recreation action (periodical), 3664
 - packed with ideas for fun, Government publications, list, 11711
 - planning for the handicapped, 17102
 - research, publications, list, 13945
 - research, reference catalog, 7029
 - space standards, 14599
 - trends, 10019
 - Peace Corps, 5384
 - promotional programs to create better total environment (address), 1719
 - rural renewal loans for recreational development—
 - law, 500
 - report, 910
 - tourism and recreation, state-of-the-art study, 13937
 - visits, use of water-meter records to estimate, 12579

Recreation—Continued

- water resource projects, cost sharing grants, report, 16368
- see also Boating.
- Recreation and Natural Beauty, Citizens' Advisory Committee on, see Citizens' Advisory Committee on Recreation and Natural Beauty.
- Recreation and Natural Beauty, President's Council on, see President's Council on Recreation and Natural Beauty.
- Recreation centers, FHA loans and grants for community centers, hearings, 15145
- Recreation resource specialists, see Recreation workers.
- Recreation workers :
 - resource specialists, examination announcements, 212, 12110
 - amendment, 8986
- Recreational areas and demonstration projects :
 - Federal recreation areas requiring entrance and user charges, 1967 Directory, 13041
 - learning in action, selected issues, 2973
- Recruiting and enlistment :
 - Army recruiting & career counseling journal, 3812
 - Army ROTC advanced course, general information, 4210
 - job satisfaction and intent to reenlist, effect of selected variables, 7370
 - Navy occupations, enlisted programs handbook, 8581
 - reenlistment at end of 1st term of Army service, prediction, 118
- Recrystallization :
 - and preferred orientation in single-crystal and polycrystalline copper in friction studies, 8481
 - chrome spinel, 9775
 - effect on friction properties of metals in single-crystal and polycrystalline form, 15574
- Rectal polyps, see Polyps.
- Rectifiers :
 - selenium, conference on production of various types, Hungary, 9634
 - silicon controlled, and transistors used by pulse generator produces high current pulses with fast rise and fall times, 1455
- Rectilinear accelerometer possesses self-calibration feature, 1453
- Red :
 - light, effect of wavelength and band width on recovery of dark adaptation, 14318
 - procion bright-red, properties as vital stain, USSR study, 14212
- Red Bird, Wyo., upper Cretaceous gastropods from Pierre shale, 5161
- Red Bird section of upper Cretaceous Pierre shale in Wyoming, 2363
- Red cedar, see Cedar.
- Red Creek :
 - engineer report—
 - departmental edition, 2218
 - document edition, 2067
- Red Dane cattle, see Cattle.
- Red flag (Chinese periodical) :
 - translations, 3946
- Red is color of hurting, planning for children in hospital, 11758
- Red maple, see Maple.
- Red oak, see Oak.
- Red pine, see Pine.
- Red River and Valley :
 - basin water quality control, engineer report—
 - departmental edition, 2196-2200
 - document edition, 2070-74
- Red Sea :
 - expedition on board USSR research vessel, Akademik S. Vavilov, results, 15352
 - lights and fog signals, lists, 5332, 9973, 14579
 - maintenance of lights, agreement, 8729

Red Sea—Continued
myxodocoid ostracods, 5315
sailing directions, 9971

Red tide:
bibliography, 9520
research summarized to 1964, 9520

Red Willow County, Nebr., soil survey report, 11809

Redcedar, *see* Cedar.

Redcliff, Newfoundland, leased bases area, continuing use of land adjacent, agreement with Canada, 7155

Reddy, N. M., use of self-calibrating catalytic probes to measure free-stream atom concentration in hypersonic flow, 11408

Redevelopment (city planning, etc.):
assistance for urban planning, Federal grants available, summary, 2381
books on urban planning, list, 4905
building a better America, 16709
city planning and urban studies fellowship program, appropriations, extend authority—
law, 14910
reports, 12360, 14945
demonstration cities and metropolitan development act of 1966, law, 465
summary, section-by-section analysis, legislative history, and conference report, 725
District of Columbia, Washington Channel waterfront priority holders, amend act, reports, 895, 7700
Federal role in urban affairs, hearings, 2117, 4640, 6111, 9316, 10841, 13865, 15157, 16413
errata sheet, 16412
print additional copies, report, 10789, 13650
5-cent urban planning commemorative postage stamp—
ceremony (address), 17110
poster, 15646
housing and urban development act, amend and extend, hearings, 10641
housing and urban development notes (periodical), 3403
hygiene problems in dwellings and hospitals, USSR conference, 5002
laws on urban development, compilation, 12290
local public agency letters, 3523
low and moderate income groups, new programs in urban development, 8193
National Capital—
1966-2000, regional development guide, 8530
proposed comprehensive plan, 8528
summary, 8529
provide cultural, international and transportation center, etc., message from the President, 7599
redevelopment area residents program, manpower development and training, overview, 10939
regional and area planning, EDA experience (lecture), 7870
role of Commerce Department in urban economic revitalization (address), 16479
small business displacements, problems under programs of public improvement, report of Attorney General, 4631
uniform and equitable relocation policies and procedures, etc., establish, hearings, 735
urban planning assistance program—
project directory, 12628
report, 3823
urban planning, information system, 11207
urban renewal—
directory, 4008, 15725
FHA mortgage insurance, consumer bulletin, 11203
manual, 4009
Nashville-Davidson County, metropolitan area, report, 12099

Redevelopment—Continued
urban renewal—continued
operations under title 1, Housing act of 1949, report, 3824
program, 17835
project characteristics, 15726
urban renewal notes (periodical), 4010

Redfern, R. E., promising candidate insecticides and acaricides evaluated at Brownsville, Tex., 13196

Redisch, William N., equilibrium analysis and its application to attitude control systems, 14499

Rediscovery of American city, address, 16716

Redmond, C. E., soil survey, Arenac County, Mich., 14654

Reduction of Nonessential Federal Expenditures Joint Committee, committee prints, 2985-86

Redundant circuits, *see* Circuits.

Redwood:
old-growth, sound wood residue left after experimental cuttings, 14106
silvical characteristics, 4853
Redwood National Park:
establish—
hearings, 15164, 17604
report, 17624

Reed, Jack W., multiple row charge blast-wave observations at long range, 1798

Reed, John H., nomination, hearing, 10823

Reed, L. B., insects and diseases of vegetables in home garden, 10171

Reed, Louis S., independent health insurance plans, 2870, 17201

Reed, R. R., structural response with different forms of damping, 14450

Reed, Ritchie H., estimates and projections of labor force and civilian employment in U.S.S.R., 12090

Reed, Roger J., some effects of DDT on ecology of salmon streams in southeastern Alaska, 8040

Reed, Walter W., starting and managing small automatic vending business, 8679

Reed, Wilmer H., III, propeller-rotor whirl flutter, 12971

Reehsinghani, N. S., mass transfer in capillaries and porous media, 8211

Reemployment of veterans, *see* Veterans.

Reemployment rights, *see* Government officials and employees.—Veterans.

Reenlistment, *see* Recruiting and enlistment.

Reentry into atmosphere, *see* Atmospheric entry.

Reentry of offender into community, 8791

Reentry vehicles, *see* Rockets—Spacecraft.

Reeves County, Tex., large-scale field evaluation of electric insect traps to reduce bollworm populations, 11915

Referees in bankruptcy, tenure in office, increase, hearing, 16420

Reference books, children's literature, guide to reference sources, 5085

Referendums:
acreage-poundage referendum for burley tobacco, 5677
flue-cured tobacco, 14758
Refineries, *see* Petroleum refineries.

Reflection (light):
electronic filter discriminates between true and false reflections, 9837
uniform reflective films deposited on large surfaces, 5203

Reflection (sound), *see* Sound.

Reflectometers, special purpose, use modified Ulbricht sphere, 9863

Reflectors, process sequence produces strong, lightweight reflectors, 8449
see also Radio reflectors—Solar reflectors.

Reflexes:
conditioned reflexes—
and memory, mechanism, USSR studies, 5014

INDEX 1967

- Reflexes—Continued
 conditioned reflexes—continued
 changes in activities of dogs poisoned
 with sarin and soman and then treated
 with nemkol-5, Bulgarian study,
 6563
 effect of actinomycin 2703 on stabiliza-
 tion, and transition from short-term
 to long-term memory, USSR study,
 1333
 motor, biologically dissimilar in monkeys,
 effects of cholinolytics, USSR study,
 9641
 unconditioned and conditioned, of mice in
 ontogenesis, influence of ribonuclease,
 USSR study, 5028
 Reforestation, *see* Forest planting.
 Reform of Federal Criminal Laws, National
 Commission on, *see* National Commission
 on Reform of Federal Criminal Laws.
 Reformatories, corrections, task force report,
 President's Commission on Law Enforcement
 and Administration of Justice,
 10031
see also Imprisonment.
 Refraction, sound by jet flow and jet tem-
 perature, 14389
see also Atmospheric refraction.
 Refractometers, use of sensing of H_2SO_4 ,
 specific gravity in lead-acid cell operation,
 13112
 Refractory materials:
 high-temperature turbine materials re-
 search, 10287
 low thermal absorption cross sections,
 vapor-pressure data extrapolated to 1000
 atmospheres, 18015
 refractories, current industrial reports,
 3170, 10358
 refractory compounds and their role in
 engineering, USSR study, 4960
see also names of materials.
 Refractory metals, *see* Metals.
 Refresher programs for inactive professional
 nurses, guide for courses of study, 10060
 Refrigerants, octafluorocyclobutane, use in
 saline water conversion by direct freeze
 separation, 12644
 Refrigerated food trailers, *see* Trailers.
 Refrigerated storage warehouses, *see* Ware-
 houses.
 Refrigeration and refrigerating machinery:
 cryogenic refrigeration systems, Joule-
 Thomson, process, errata, 12989
 equipment—
 current industrial reports, 5853
 Federal item identification guides for
 supply cataloging, supplements, 3288
 improved cryogenic refrigeration system,
 12885
 single-engine Claude cycle as 4.2°F re-
 frigerator, 14517
 testing and rating refrigerated truck
 bodies, 17335
see also Refrigerators.
 Refrigerator cars temperatures, relative hu-
 midity, and atmosphere composition in
 mechanically refrigerated car loaded with
 lettuce, 15825
 Refrigerators:
 clean vacuum attainment with one-watt
 refrigerator, 12930
 gravity independent vapor absorption re-
 frigerator, 14385
 Refugees:
 and escapees, problems, investigation, au-
 thorization, report, 4620
 Cuban, adjustment of status—
 law, 445
 reports, 662, 706, 909
 Cuban and others, assistance—
 appropriations, 1967, law, 405
 appropriations, 1968, hearings, 15014
 Cuban, movement to United States,
 agreement, 2903
 Refugees—Continued
 U.S. apparatus of assistance throughout
 world, hearings, 4649
 Refugees, *see* Wildlife refugees—also names
 of refugees.
 Refunds of taxes, *see* Tax refunds.
 Refuse:
 collection and disposal, bibliography, 8642,
 11753
 disposal, international research group
 bulletins, 2827
 national status on control of garbage-
 feeding, 3599
see also Waste products.
 Regan, W. H., solidification and long-term
 storage of highly radioactive wastes, pro-
 ceedings, 5767
 Regato, J. A. del, conference on radiobiology
 and radiotherapy, 7075
 Regeneration (biology):
 conifers, in southeast Alaska, effects of
 slash burning, 4834
 mixed conifer clearcuttings on Apache
 National Forest, Ariz., 11126
 sand pine, shelterwood method, 9539
 seed fall and regeneration from group
 selection cut, 1st year results, 4840
 Regier, Donald W., growth in demand for
 feed grains in EEC, projection to 1970 and
 1975 in relation to consumption, 13949
 Regional air cargo workshop (periodical),
 3818
 Regional Economic Development Office, an-
 nual report, 2159
 Registers:
 Air Force—
 departmental editions, 5699-5700
 document editions, 5983-84
 Army—
 departmental editions, 8896A, 10284-
 285
 document editions, 9032, 10502-503
 Army Materiel Command, approved re-
 curring reports, 1749, 7376, 11981,
 14788, 17372
 Army National Guard, 11508
 blind persons in D.C., establish report,
 16382
 civil aircraft, United States, 7953, 17749
 Coast Guard, 7560
 Coast Guard Reserve, 7559
 Communist organizations, amend internal
 security act, report, 16290
 Federal register, 3311
 codification guide, list of CFR sections
 affected, 3312
 index, 3313
 Hill-Burton projects, 3398, 8633, 18169
 microform masters, 2530
 Military Academy, West Point, 11350
 National Driver State records ex-
 change service, 18087
 Naval Academy, Annapolis, 15617
 Navy and Marine Corps officers—
 departmental edition, 11662
 document edition, 10501
 Navy and Marine Corps retired officers,
 1546
 papers in Library of Congress—
 Chambers, Washington Irving, 11340
 Schurz, Carl, 8330
 shellfish production areas, 7078
 State Department, biographic, 14670
 Registration, *see* subjects.
 Regression (statistics):
 diamond drilling, analysis, 2584
 fitting surfaces to assay and other three-
 dimensional data by quadratic-regression
 analysis, computer method, 2580
 multivariate regression equations devel-
 oped for predicting volumes in Hawaii
 hardwoods, 8084
 nonlinear regression and principle of last
 squares, 6681

Regulations, *see* Code of Federal regulations—also names of departments, etc., issuing regulations—also subjects.

Regulators, optimal attitude, for spinning space station, design method, 6594
see also Electric current regulators.

Regulatory agencies, *see* Government offices.

Regulatory announcement, Fish and Wildlife Service, 1080, 14061, 16623

Rehabilitating the narcotic addict, 13175

Rehabilitation:
housing, HUD programs, report, 17643
urban, financial institutions (remarks), 16590

Rehabilitation Certificates, Exemplary, *see* Exemplary Rehabilitation Certificates.

Rehabilitation counselors, *see* Counselors.

Rehabilitation of criminals:
corrections, task force report, President's Commission on Law Enforcement and Administration of Justice, 10031
reentry of offender into community, 8791

Rehabilitation of the disabled:
blind, new life through vocational rehabilitation, 17184
characteristics and trends of clients rehabilitated, 1962-66, statistics, 8784
coordinator's scorecard, review of what's new in placement of handicapped, 8990
cost-benefit analysis of vocational rehabilitation, exploratory, 18196
elementary nursing care, 1571
facilities and sheltered workshops, standards, 10129
heart disease, cancer, stroke, characteristics of clients rehabilitated in State vocational rehabilitation agencies, 7221
help through vocational rehabilitation, 17182
impact of returning disabled Vietnam veteran (remarks), 18143
international programs (remarks), 11705
mentally restored, interviewing guide for employment counselors, 10944
opportunities for the hard of hearing and the deaf through vocational rehabilitation, 1662
problems of severely handicapped (remarks), 11700
rehabilitation agency and community work, source book for professional training, 7222
rehabilitation counselor, medicine and medical practice, survey, instructor's manual, 10128
rehabilitation record (periodical), 3818, 17185
rehabilitation service series, 11892-893
research and demonstration projects approved, 10130
sheltered workshops, pathway to regular employment, 6593
target rehabilitation, social security disability program, what professional people who work with the disabled should know, 2862

vocational—
help for the mentally retarded, 13174
information for persons disabled in military service, 2966
new grant programs, progress report, 5589
staff, guidelines for organization and operation of vocational evaluation units, training guide, 11892
State agencies, caseload statistics, 5588
State divisions, directory, 7220
State salary, ranges, 4898, 11194
training methods, staff, 11893

vocational rehabilitation act, amendments of 1967—
hearings, 15172, 17600
law, 16144
reports, 14972, 16366
6 steps forward, 17186

Rehabilitation of the disabled—Con.
vocational rehabilitation act compilation, 4653
workshop for Baptists on deafness and rehabilitation, University of Tennessee, 2968

Reher, Harold A., valid zoological names of Portland catalogue, 8546

Reichenecker, W. J., NASA contributions to metals joining, 6738

Reld, J. Christopher, research in instructional television and film, 9409

Reld, J. David, making household fabrics flame resistant, 10177

Reld, Tommie, Job Corps staff newsletter, 3454

Reld, Warren R., public papers of Lyndon B. Johnson, 2256

Reld, William J., jr.:
control of caterpillars on commercial cabbage, etc., 15847
pickleworm, how to control it on cucumber, squash, etc., 4116

Reinforced concrete, *see* Concrete.

Reinforcements, fibrous reinforcements for space applications, 11418

Reinforcing role of States in education, 13961

Reinsurance, Federal program to protect employees under private pension plans, establish, hearing, 950

Reischauer, Edwin O., statement, 6099

Reisen sie in eine neue welt der kuche, besuchen sie die USA, 17278

Reiss, Albert J., jr., crime and law enforcement in major metropolitan areas, 13080

Relampagos, Gloria A., relief, 286, 548

Relativity (physics):
special relativity, how to understand, 13346

Relay I radiation experiment, 1482

Relays, *see* Electric relays.

Release devices, controlled, prevents damage from dynamic stresses, 6790

Releases, *see* name of office issuing releases.

Reliability (mechanical):
analytical technique permits comparison of reliability of alternate mechanical designs, 15491
Apollo applications reliability and quality assurance program plan, 11393
bionics and reliability, USSR study, 11251
complex technical systems, USSR study, 12743
design review for space systems, 14405
diode reliability prediction technique, 6720
earth satellites, effectiveness of systems tests, 2697
NASA, evaluation of reliability programs, 8442
reliability abstracts and technical reviews (periodical), 9930
screening of semiconductor and integrated circuit devices for high reliability, 9800

Relief work:
disaster—
communications, FCC rules and regulations, 3276
Federal assistance, guide, 7919
groups in disaster (paper), 10049
relief act of 1965, law, 473
relief, status of funds, report, 7603

Religions:
Communist exploitation of religion, hearing, print additional copies, report, 12371
religion and mental health, 1960-64, bibliography, 11719
South Vietnam, faith and fact, 14587
Religious articles, importation, customs information, 7841
Religious education, teaching in Armed Forces, Protestant religious education program, 17706

INDEX 1967

Religious liberty, enforcement of 1st amendment to the Constitution, report, 10729

Relocation, *see* Eminent domain—Plants (industrial).

Relocation (housing), *see* Redevelopment (city planning, etc.).

Remote control:
computer program determines performance efficiency of remote measuring systems, 2638
head-controlled TV system high-quality remote image, 16887
high pressure valve, remotely operated, protects personnel testing spacecraft systems, 15551

Remote sensors, *see* Sensors.

Rempfer, Paul S., design method for optimal attitude regulator for spinning space station, 6894

Renal diseases, *see* Kidneys.

Rendezvous (space):
advanced antenna techniques for rendezvous radar, study, 11403
lunar mission, abort guidance, manual technique with concentric-flight-plan rendezvous, 14481
lunar module, sextant navigation measurements, analysis, 6903
rendezvous and docking, space vehicle flight control systems, analysis and design, 12874

RONDOVU/PRESTO, program for mission trajectory optimization, 5179

Renegotiation, *see* Government contracts.

Renegotiation act of 1951, *see* Government contracts.

Renegotiation Board:
annual report, 7104
appropriations, 1968—
hearings, 9145, 15147
reports, 10600, 15131
bulletins, 11777, 13105-110, 15722-723
regulations, 13197-198
rulings and bulletins—
index, 15721
table of citations, 15724

Reno, Pa., underground combustion oil-recovery experiments in Venango second sand, Reno pool, Venango County, 11372

Rensselaer Polytechnic Institute, linear accelerator, use in plasma oscillations, experiment, 12870

Rent:
shares of crop as payment in farm operations, 7223
supplement—
assistance, FHA regulations, 1048
help for tenants, 12623
program, assistance to elderly, effects, hearings, 13838
program for low-income families, general information, 4900, 6422
proposals, how to develop, guide for sponsors and housing owners, 6424, 11200
your farm rent determination problem, 17311

Rental housing, *see* Housing.

Reorganization of Government activities, *see* Government reorganization plans.

Repair parts:
aircraft—
Army Dept. management at depots in U.S., GAO review, 9555
certification procedures, Federal aviation regulations, 6238, 10988
procurement for outfitting aircraft carriers, potential savings, Navy Dept., GAO report, 8136
certification procedures for products and parts, Federal aviation regulations, 10987
packaging and packing procedures, military standard, 16468

Repair parts—Continued

savings by eliminating low-cost, low-demand space parts from defense supply system, Navy Dept. and Defense Supply Agency, GAO report, 17815

Repair shops:
equipment, Federal item identification guides for supply cataloging, supplements, 3287
specialized equipment, industrial plant equipment handbook, 7852

Repair stations, *see* Aircraft repair stations.

Repairing, *see* subjects.

Repairmen, *see* Mechanics (persons).

Repas, David S., voltage distortion effects of SNAP-8 alternator speed controller and alternator performance results, 12950

Repellents, *see* Insect repellents.

Repenning, Charles A., subfamilies and genera of Soricidae, 14173

Replacing a zipper, 7288

Reporters and reporting, Pravda reviewer comments on 1966, USSR study, 5006

Reports:
government research and development reports, program, availability, etc., 5294, 14520
new technology reporting to NASA—
management guidelines, 1418
reportable items under new technology clause, 5279
preparing contractor reports for NASA, data presentation, 1443
reports to be made in Congress, list, 4485
see also names of departments, etc., issuing reports—*also* subjects.

Reproduction:
expanded model, economic computations, USSR book, 16734
yellow-poplar softwood cuttings, short-term storage, 11131

Republic Aviation Corporation, Farmingdale, Long Island, post layoff labor market experiences of former workers, 5719

Republic of China, *see* China.

Republic of Korea, *see* Korea.

Republic of Nigeria, *see* Nigeria.

Republic of South Africa, *see* South Africa.

Republic of Vietnam, *see* Vietnam.

Republic quadrangle, Wash. geology, 16682

Republican Party, report, 89th Congress, 2d session, supplement, 4572

Request oriented information selection program, 8506

Requirements for electing union officers, 8286

Requisitions:
MILSTRIP, military standard requisitioning and issue procedures, manual—
changes, 6153, 15199
supplements, 4679, 6152, 16472
requisition fund codes, MILSTRIP, 16473

Rescue equipment and appliances:
aircraft, fire and rescue truck, 1,000-gallon, guide specification, 10246
Federal item identification guides for supply cataloging supplements, 3287

Rescue operations, *see* Rescue work.

Rescue work:
manual for rescue divers, USSR, 6503
national search and rescue manual, amendment, 12124
rescue breathing, infants and small children, general information, 5461

Reseal program in commercial storage, hearings, 10627

Research:
Academy of Sciences, Ukrainian SSR, organization of comprehensive research, 15399
cooperative research to improve nation's schools, report, 16510
external research paper, 7144
Federal research and development programs, decisionmaking process, report, 15001

Research—Continued

Federal research & development reports, Government-wide index, 3381
 National Institute of Allergy and Infectious Diseases, role of collaborative research program, 8649
 naval, reviews (periodical), 3607
 research activities, USSR need cited, 2428
 research and development—
 congressional concern, bibliography, 4641
 federally financed, investigation and study, authorization, report, 6075
 funds equitable distribution among States by Government agencies, hearings, 10839
 geographical distribution, of Federal funds, 13012
 Government reports, abstracts, etc., 3984
 Government-wide index, 3381
 management and marginal employee, personnel practices, etc., 2242
 resources, funds and manpower in U.S., national patterns, 14562
 small business pooling, 5496
 review of selected Government research and development reports, 2742
 symposium, 17163
 see also Legal research—Military research—Scientific research—also names of departments, etc., doing research—also subjects.
 Research analysts, operations, examination announcement, 10430
 Research and development reports, Atomic Energy Commission, 122-129, 1774-1812, 4231-38, 5755-95, 7417-33, 8901-11, 10297-304, 12000-19, 13313-349, 14808-809, 15958-969, 17390-400
 Research and development series, Army, 4219A
 Research and statistics notes, 1607, 2866-67, 5514-16, 7129-32, 8689-90, 10086, 11798-799, 17198-202, 18208
 Research Bureau, Education Office, support for research and related activities, description, 6193
 Research Conference in Pulmonary Diseases, transactions, 13172
 Research Conference on Patterns of Living and Housing of Middle-aged and Older People, proceedings, 14634
 Research foresters, see Foresters.
 Research information digest, recent publications of southeastern Forest Experiment Station, 11109
 Research laboratories, Federal research equipment, better management, procurement, and utilization, hearing, 15028
 see also names of laboratories or places where located.
 Research notes, Forest Service, 1088-93, 2297-2326, 4826-45, 6365-70, 8059-99, 9533-40, 11110-131, 12570-583, 14087-122, 15281-286, 16654-660, 17801-804
 Research papers, Forest Service, 1094-98, 2327-34, 4846-56, 6371, 8100-20, 9541-44, 11132-141, 12584, 14123-145, 16661-664, 17805-806
 Research profiles, National Institute of Neurological Sciences and Blindness, 18175-183
 Research reactors, see Reactors (atomic).
 Research reports:
 Cold Regions Research and Engineering Laboratory, 97, 1754, 4196-97, 5725, 7378-80, 8878, 10255-268, 11982, 13290-292, 14792, 15930, 17374-376
 Fish and Wildlife Service, 11090, 17783
 Lake Survey, 12776, 16833

Research reports—Continued

National Cancer Institute, 15708
 price lists, selective bibliography of Government reports, list, 1933
 Reclamation Bureau, 7102, 10073, 11774-775, 17181
 Social Security Administration, 1608, 2568-70, 13119-120, 17203
 Research review (periodical), 16478
 Research Services Division, NIH, services in 1966, record of achievement, 10046
 Reserve components of Armed Forces:
 construction appropriations, 1967, law, 457
 construction appropriations, 1968, hearings, 16305
 deceased members of National Guard and Ready Reserve, furnishing uniform, and presentation of flag of United States, report, 16229
 enlisted members of Army, etc., credit inactive Reserve service in computing retired pay, report, 16270
 facilities, construction authorization, 1967, report, 623
 facilities, construction authorization, 1968—
 hearings, 13695, 16395, 17637
 law, 17555
 reports, 13684, 13688, 16284, 16371
 job rights, key answers for employers, etc., 14714
 personnel, training, equipment, and readiness status, subcommittee report, 2107
 physicians' appointment and residency consideration program, information bulletin, 12441
 Reserve forces bill of rights and vitalization act—
 hearings, 6030, 17640
 reports, 658, 6012
 Reserve Officers Training Corps, Air Force, do you measure up to Air Force ROTC, recruiting information, 15885
 Reserve Officers Training Corps, Army:
 advanced course, general information, 4210
 Junior ROTC—
 manual, 17385
 training today for leadership tomorrow, 4193
 manual, 1766, 17385
 Reserve Officers' Training Corps, Navy, Naval Junior ROTC, fall 1967 bulletin, 11659
 Reservoirs:
 Columbia River basin, storage in major power reservoirs, monthly report, 3907
 evaporation control, effects of monolayers on insects, etc., 7102
 oil—
 Cut Bank field, Mont., characteristics, 8376
 permeability curves of concern to engineers, 14360
 water-drive, recovery of additional oil, 2574
 outlet works, Howard Hanson Dam, Green River, Wash., hydraulic model investigation, 2201
 Pacific Northwest, month-end storage in major reservoirs, 3907
 Pahrump Valley, hydrology of valley-fill and carbonate-rock, 14178
 petroleum and natural gas, gravimetric effects on mass properties of sedimentary rocks, 12608
 small, hydrologic effects in Sandstone Creek watershed, Beckham and Roger Mills Counties, western Oklahoma, 2376

Reservoirs—Continued

United States, 4895
see also names of reservoirs.

Residences, see Houses.

Resident physicians, see Physicians.

Resident youth worker for duty in Job Corps conservation centers, 12111

Residential construction, see Building.

Residual magnetism holds solenoid armature in desired position, 8464

Resins:

epoxy—

glass-epoxy fabricated plates, compressive behavior, 9895

microparticle and fiber reinforcement, 5352

photosensitive filler minimizes internal stresses, 14429

infrared spectra, related polymeric materials (elastomers), 15636

m-aminobenzyl amine (MABA), syntheses, properties, and uses, 9989

materials, U.S. production and sales, preliminary report, 3699

phenolic-carbon composite, nondegraded and thermally degraded, thermal and mechanical properties, 16917

resin fraction from various low-temperature tar pitches, characterization, 6632

synthetic, primer for coal-tar enamel, 10073

see also Adhesives—Naval stores.

Resistance, see Electric resistance.

Resistance heating releases structural adhesive, 8469A

Resistors, see Electric resistors.

Resolutions:

digest, 3206

history, 3132

see also Law—Senate bills.

Resonance:

dampers reduces effects on force transducer, 5216

frequency, natural shift, 2745

resonance type machine, for high temperature vacuum fatigue testing of type 316 stainless steel and Inconel X, 11676

tungsten resonance absorption integrals, determination by activation, 18012

see also Electric resonance—Electron spin resonance—Nuclear magnetic resonance.

Resonance capture, see Neutrons.

Resonance integrals, see Neutrons.

Resonant frequency can be adjusted on vibration mount, 6829

Resonators, cavity resonator formed by region between earth and lower ionosphere, model, 2225

Resort areas, climatic summaries, 12478

Resource bulletins, Forest Service, 2335-39, 4857-60, 8121-24, 14146, 15290, 16665-666, 17507-809

Resource management system, procedures manual, class 1 installations, 7384

Resource publication (series), 1081, 2280-81, 4808, 6356, 8033-34, 12548, 15267, 16624-626, 17784-785

Resources, see Natural resources.

Respiration:

bedrest effect on circulatory response to Valsalva maneuver, 2595

breathing in flight, the higher you fly the less air in the sky, 8920

breathing under high ambient pressure, 12792

forces deforming rib cage, 10238

head lettuce in low-oxygen atmospheres, market quality and rate of respiration, 10180

indirect calorimetry in low pressure environment, 11957

measurement of total body hemoglobin by bloodless techniques, 10232

normal young adults at 3475 and 4300 meters, 5753

Respiration—Continued

oxygen breathing effects upon night vision thresholds, 11347

oxygen-helium atmosphere—

56-day exposure study, 92

observations, 80

physiological protective efficiency of civil aviation oxygen equipment, techniques for evaluating, development, 15979

prototype airborne respiration analyzer, feasibility testing, etc., 8425

rate, development of transducers for aircraft environments, 18044

rescue breathing, infants and small children, general information, 5461

variations in process during gamma radiation of plant tissue, 8511

what should cosmonauts breathe? USSR study, 5019

Respiratory system, reactions of crewmen during Voshkod-2 orbital flight, 6555

Response functions:

human operator response speed, frequency, and flexibility, review, analysis and device demonstration, 16904

normal response, functions calculation time, computer program reduces, 11446

Responsible conduct and American economy, today and 10 years from now, 2956

Rest

bedrest—

effect on physiological function, 2595

effects of muscular exercises and intermittent venous occlusion as possible preventive of cardiovascular deconditioning after bed recumbency, study, 8408

hypoxic, effects of lower body negative pressure on physiologic changes after 4 weeks, 7346

prolonged effects of 9-alpha-fluorohydrocortisone and venous occlusive cuff on orthostatic deconditioning of 7365

prolonged, long-term lower body negative pressure, influence on circulatory function of man, 1734

prolonged, metabolic effects of prolonged bed rest, their modification by simulated altitude, 14777

short-term, effect on plasma volume and catecholamine response to tilting, 7345

man during early exposure to high altitude, cardiopulmonary responses, 7413

Restaurants, lunchrooms, etc.:

employees under fair labor standards act as amended, 7225

school lunchrooms, work injuries and accident causes, 14282

Rester, D. H., electron scattering and bremsstrahlung cross-section measurements, 9811

Restivo, Guiseppina, see Bellizia, Josephine A.

Restos, Marina P., relief, 795, 19548, 13520, 13758

Restraint apparatus:

aircraft, basic systems, functional comparison, 17413

Army fixed-wing cargo restraint design criteria analysis, 10289

internal, development for integrated restraint-pressure suit system, 6727

shoulder installation in general aviation aircraft, recommendations, 7446

Retail prices, see Prices.

Retail stores, see Stores.

Retail trade:

Azerbaijdzhan SSR, retail store networks, problems, 1171

census of business, 1963—

area statistics, 10339-340

bound volume, 151

gasoline service stations and liquefied petroleum (LP) gas dealers, 4270

leased departments, 5816

Retail trade—Continued

census of business, 1968—continued
major retail centers, area statistics,
bound volume, 1832

retail and wholesale cooperatives, 5817
subject reports, bound volumes, 5818,
5930-31, 10341

continuing review, Census Bureau surveys,
announcement and order form, 1884
current retail trade reports, 3172
annual sales, inventories, etc., 17439
employee earnings and hours—

June 1965, 8302

June 1966, 11332

minimum wage and maximum hours, study
to measure effects of 1961 amendments,
5591

operating costs and ratios, bibliography,
5493

retail and service enterprises and estab-
lishments under fair labor standards
act as amended, 8788

see also Salesmen and salesmanship—*also*
names of commodities and industries.

Retailers, encourage your low-income cus-
tomers to take part in food stamp pro-
gram, 17330

Retainers, *see* Ball-bearing retainers.

Retaining walls, reinforced concrete, cantilever and counterfort types, typical plans
18194

Retina, burns from low-yield nuclear detona-
tions, threshold distances, 69

Retired officers, etc., *see* Armed Forces.

Retired pay, *see* Pensions.

Retirement:

age requirement, lower for former Light-
house Service employees, report, 12251
benefits under OASDHI, comparison with
prices and wages, 1966 experience, 8690

District of Columbia teachers on full an-
nuity at age 55, amend act, report,
14992

foreign affairs agencies, information for
prospective retirees, 8721

measuring early retirement, revision of
benefit awards series, 17198

planning for the later years, 18207

program, build your own with savings
bonds, 5481

public employee systems, benefits and bene-
ficiaries, 11798

social security benefits—

information, 10085

rights and responsibilities of recipients,
7133

social security increases, reduction of
benefits—

hearings, 10798

report, 15144

State and local government systems—

covering employees also covered by Fed-
eral old-age, survivors, disability and
health insurance program, survey,
2868

1965-66, finances, 7492

see also Armed Forces—Civil service pen-
sions—Judges—Pensions—Railroad em-
ployees.

Retirement and disability fund, *see* Civil
service pensions.

Retirement insurance, *see* Old age, survivors,
and disability insurance.

Rettie, Dwight F., remarks, Aug. 23, 1967,
16713

Réunion Island, labor conditions, 5077

Reuss, Henry S., food for progress in Latin
America, 13701

Reuss, Max L., jr., conjugate-pair feed sys-
tems, 5360

Revenue:

agent, career in professional accounting,
IRS, 1147

carload waybill statistics, 1964, territorial
distribution, traffic and revenue by com-
modity classes, 6473

Revenue—Continued

District of Columbia Federal payment au-
thorization and borrowing authority act
of 1967, hearings, 10646

rail revenue contribution by commodity
and territory, 8234

revenue sharing and its alternatives, what
future for fiscal federalism? 13546
hearings, 16149

see also Internal revenue—*also* names of
articles, etc., from which revenue is
derived.

Revenue officer, 2409

Revenues and classes of post offices, 5390

Revetments, *see* Shore protection.

Review essay, evolution of an economist,
6616

Revision and Codification Subcommittee,
Judiciary Committee, Senate, resumé of
activities, report, 10743

Revolution, 1775-83, naval documents of
American Revolution, American theatre,
Sept. 3-Dec. 7, 1775, European theatre,
Aug. 11-Oct. 31, 1775, 2773

Revolutionary War, *see* Revolution, 1775-
83.

Revolutions, world revolutionary process,
USSR study, 12715

Revolvers, use and care, 17116

Revolving funds:

Guam development fund, establish, report,
15134

Indian loan fund, amend law, reports, 642,
15116

Rewards (prizes, etc.):

America's airport beautification awards
program, 17741

awards and recognition of President's
Committee on Employment of the

Handicapped, 1355

candidates for state prizes, USSR, 11282

college architecture design awards, 7904

designs for higher education facilities,
7894

excellence in national public service (re-
marks), 2950

fallout shelter designs receiving awards in
Brooklyn competition, 7529

Housing and Urban Development Depart-
ment honor awards for design excellence,
16710

John E. Fogarty Public Personnel Award,
presentation to Morris Leonhard (re-
marks), 17125

Latvia State prize candidates in science
and production, USSR announcement,
12683

national fallout shelter design competi-
tion, community center, awards, 16060

National Guard Association trophy,
Pershing trophy, National Guard
(State) trophy, announcement of win-
ners, 14522

National Institute of Mental Health,
graduate and undergraduate training,
7066

Navy and Marine Corps, ribbons of decora-
tions and awards (poster), 11663

presidential award, new youth fitness test
norms, 5408

President's Committee on Employment of
the Handicapped, awards program at a
glance, 1356

President's E award for export excellence,
presentation to—

A. R. Wood Manufacturing Co., (re-
marks), 4448

Dole Company (remarks), 7295

Panelfab International (remarks), 1949

York-Shipley, Inc. (remarks), 4447

recognition and awards program, FAA
handbook, 4754

True Davis on accepting Americanism
award from veterans of foreign wars
(remarks), 15810

Ricketts
for rig
Ricketts
nism.
Rickove
Riddick
classifi
enact
762
Rieckm
lat
anlis
Rieding
mosi
Riely,
pher
Riesz,
of M
Rietz,
Jum
Riffau
port
Rifles
Arm
h
M-
h
s
Riga,
154
Risby
com
Rizdo
171
Rizge
203
Rizgl
air
C
ge
Richt
80
Richt
ce
Richt
Richt
th
Rille
s
f
Rille
2
Rille
r
Rille
Rille
Rille
Rille
Rille

- Rhubarb:**
packaged, storage and shelf life, 5645
production, outdoors and in, 10174
Rhyacionia, see *Tip moths*
Rhyolite, grades in compositionally zoned
ash-flow sheet in southern Nevada, 1120
Rib cage, forces deforming, 10238
Ribbons, gratings and networks of aluminum
ribbons as radio reflectors, 16302
see also *Service ribbons*
Ribbons for typewriters, cotton cloth, Tariff
Commission reports, 2942, 10110
Ribonuclease, influence on reflexes of mice in
ontogenesis, USSR study, 5028
Ribonucleic acid:
masked form of messenger RNA, USSR
study, 6839
tobacco mosaic virus, problem of possi-
bility of infecting animal cells, USSR
study, 6486
Ricardo, O. G. S., displacements of thin-
walled cylinder, 17947
Ricci, Robert C., present and future state of
the art in guidance computer memories,
18049
Ricciardi, Constantine A., stereoscopic angle
and its relationship to standard Air Force
tests for depth perception, 70
Ricciard, Edward R., animals in atomic re-
search, 1597
Ricciuti, Robert A., industrial heating equip-
ment industry, 10330
Rice, J. Wade:
advertising, retail store, 5494
furniture retailing, bibliography, 15732
Rice:
acreage allotments—
certain producers, etc., reports, 9101,
10571
1967 crop year, hearings, 9140
California stocks and movement report,
3074
foreign agriculture circulars, 3345
good choice for thrifty family, food value,
use, recipes, 10875
market news, 3837
supplement, rough rice receipts, 3838
market summary, 1966, 2135
marketing excess, delivery to Commodity
Credit Corporation, report, 16369
rough, costs of drying and storing in
Louisiana and Texas, 15864
situation, 4706
southern, inspected for export, 3885
Rich, Leslie, it's fun to yell bravo, Lincoln
Center's student program opens new world
to teenagers, 12465
Rich, Marvin A., conference on murine
leukemia, 1583
Richard, Herbert L., atmospheric transmis-
sion of infrared radiation from 2-3 mi-
croons for slant paths from 35,000 ft. to
upper limit of atmosphere, survey, 12931
Richardson, Harry L., small gas turbine en-
gine accessory technology, 10291
Richardson, John L., mass transfer prop-
erties of saline water systems, 2393
Richardson, P. D., transient radiation and
conduction in slotted slab and hollow
cylinder, 17941
Richey, Everett O., threshold distances for
retinal burns from low-yield nuclear de-
tonations, 6839
Richland County, N. Dak., soil survey report,
8702
Richmond, Joseph C., procedures for precise
determination of thermal radiation prop-
erties, 6921
Richmond, Va., area wage survey, 8304
Richmond National Battlefield Park, gen-
eral information, 2758, 8560
Richie, Mrs. M. M., relief, 7658 13788,
14905
Rickenbacker, Edward V., Tony Jannus
award (address), 4398

Ricketts' organism, fluorescent antibodies for rickettsia detection, USSR study, 12666
 Rickettsia prowazekii, *see* Ricketts' organism.
 Rickover, Hyman G., testimony, 10630
 Riddick, Floyd M.:
 classification of United States Senators, 762
 enactment of law, procedural steps in legislative process, 13720
 Rieckmann, R. E., panel attachment mechanisms suitable for refurbishable panel application, 5160
 Riedinger, A., acid mine water reverse osmosis test at Kittanning, Pa., 4915
 Riely, Phyllis E., effect of diet and atmosphere on intestinal and skin flora, 2613
 Ries, John E., livestock and meat industry of Mexico, 5048
 Rietz, Raymond C., presurfacing green oak lumber to reduce surface checking, 2301
 Riffaud, Madeleine, Communist reporter, reports her visit to North Vietnam, 1294
 Rifles:
 Army, procurement and distribution program—
 hearing, 10807
 report, 10810
 M-16 program—
 hearings, 17590
 subcommittee report, 17591
 Riga, Latvia, travel to, Finnish brochure, 15429
 Rigby, Malcolm, NODC quarterly accessions, computer produced indexes, 3636
 Rigdon, Dorothy, rehabilitation record, 17185
 Riggers, examination announcement, amdt., 203
 Rigging:
 airdrop operations, technical manuals—
 Air Force communication control vehicles, 1771, 7398
 cargo trailer, 15949
 CW-BW water pretreatment decontamination set, 10280
 howitzer, 15950
 trailer-mounted air compressors, 15951
 210 CFM Davey, trailer-mounted air compressor, 113
 typical supply loads, 8887
 weapons carrier, 10281
 gear and equipment, safe working loads, technical reference, 9733
 Rights and responsibilities of recipients of social security retirement or survivor benefits, 7133
 Rights and responsibilities of those who receive special payments, 15740
 Rights of privacy, *see* Privacy.
 Rights-of-way, *see* Roads and highways.
 Rigid-body motion extracted from total motion of flexible body, 9845
 Riley, Donald R., comparison of results of 2 simulations employing full-size visual cues for pilot-controlled Gemini-Agena docking, 1495
 Riley, H. L., mineral industry of Kentucky, 2555
 Riley, Kathleen E., records relating to enrollment of Eastern Cherokee, pamphlet, 18072
 Rim, Kwan, integral equation method in plane elasticity, 9819
 Rhinehart, R. W., delineation of trace constituents of closed ecologic system, 7369
 Ringel, Seymour, command information processing systems, human factors research program, 119
 Ringelmann smoke chart, *see* Smoke.
 Rings:
 NOL glass-filament-wound model for testing measurement, minimization, and correlation with interlaminar shear strength of microvoids in structures, 11677

Rings—Continued
 toroidal—
 pressurized, buckling under uniform external loading, 15570
 prevents gas ignition at vent stack outlet, 9853
 working blade-rings of turbines, etc., friction and leakage losses, 5277
 Rio Grande and Valley, water supply outlook and snow surveys, 4045
 Rio Muni, labor conditions, 5073
 Riots:
 civil and criminal disorders, investigation, interim report on findings, 16375
 insurance protection study availability, hearing, 16402
 long-range implications of summer disturbances in slums (remarks), 17841
 penalties for inciting, reports, 12282, 13664, 15165, 16419
 Ripening of fruit, etc., *see* names of fruits, etc.
 Riprap:
 stability under wave action, rock movement in large-scale tests, 16520
 use for bank protection, 14640
 RISE, *see* Radioisotope submersible engine.
 Risk, international sales, buyer's or seller's assumption, Bulgarian discussion, 5013
 Ritter, Dorothy, hardware retailing, 7113
 Riva, Dominguez, Ramiro de la, *see* Dominguez, Ramiro de la Riva.
 Rivers:
 aeration capacity of streams, 9570
 and harbors, flood control, omnibus bill, 1966, hearings, 751
 basin operations, institutional arrangements for managing, 17292
 basin plans, additional authorization, 1968—
 hearings, 12312, 12427
 law, 10486
 reports, 9122, 9298
 basins, clean water restoration act of 1966, pollution control and abatement, program—
 law, 12156
 text, 6340
 basins, southeastern Michigan water resources study information bulletin, 7929
 daily weather and river bulletin—
 Albuquerque, N. Mex., area, 3184
 Houston, Tex., area, 3185
 Memphis, Tenn., area, 3180
 New Orleans, La., area, 3186
 Shreveport, La., area, 3179
 doctrine for riverine operations, Marine manual, 8331
 entrenched stream systems, Harrison County, Iowa, 1722
 fish habitat characteristics of streams, technique for sampling, 17806
 flood control and multi-purpose projects public works authorization—
 law, 493
 report, 698
 flood control, improvements, compilation—
 departmental edition, 1025
 document edition, 516
 measurement of peak discharge by indirect method at width contractions, 14176
 mountain streams, aerial photo techniques for recreation inventory, 14128
 national and scenic rivers system—
 hearings, 10855
 report, 15094
 Oregon streams, correlation and analysis of water-temperature, 8177
 physiographic and hydraulic studies (series), 17823

INDEX 1967

Rivers—Continued

radiolotope gauge for monitoring suspended sediment concentration in rivers and streams, 1794
 river basin surveys papers—
 departmental edition, 11973
 document edition, 12193
 river-crossing operations, Army field manual, 4208
 river hydraulics (series), 1133
 roughness characteristics of natural channels, 17833
 rules concerning sailing vessels, etc., law, 468
 southeastern Alaska, DDT effects on ecology of salmon streams, 8040
 streambank rehabilitation, waterline erosion control, 14099
 streamflow from small tree-covered and fern-covered and burned watersheds, Hawaii, 8115
 streams, measurement of peak discharge by indirect method, techniques, 11184-185
 temperatures, Pacific Northwest, 3839-40
 USSR, chemical nature of organic matter in waters of major rivers, 9614
 western navigation, rules of the road, 4421
see also names of rivers, or places where located.
 Riverside, Calif., area wage survey, 5067
 Rivers, rivet caps and collars, Federal item identification guide, 15186
 RNA, *see* Ribonucleic acid.
 Road machinery:
 machine-driving of wooden posts, way to reduce highway guardrail costs, 11138
 maintenance equipment, Federal item identification guides for supply cataloging supplements, 3285
 Road to forest management, 1652
 Roads and highways:
 access highway through Manitoba to northwest angle of Minnesota, construct, agreement with Province of Manitoba Canada, 2096
 advance acquisition of rights-of-way study, 17611
 approach roads, 1960-64, Greenland, 15932
 bank protection, use of riprapi, 14640
 building Federal highway safety programs (remarks), 5959
 code of Federal regulations, 6280
 emergency construction at military installations, general provisions and geometric design, technical manual, 5742
 Federal-aid highway act of 1966—
 hearings, errata, 4656
 report, 638
 Federal-aid highways, needs after 1972, AASHO report, 12321
 hearing, 12314
 print as Senate document, report, 12370
 Federal aid in construction, laws, compilation, 1988
 Federal-aid highway program, remarks, 1950, 2844
 see also below, Interstate system.
 Federal-State highway management practices and procedures hearings, 2055
 flexible pavement design for roads, streets, walks, emergency construction, Army technical manual, 10277
 freeways, District of Columbia commissioners, authority to lease air space, above, on, and below rights-of-way, hearings, 16407, 17598

Roads and highways—Continued

Government programs, safety, beautification, etc., big job ahead (remarks), 8663
 Haines Road, winter maintenance, agreement, 17230
 highway beautification program—
 authorizations, 1968—
 hearings, 15174
 reports, 15126, 16272
 billboard removal compensation under Highway beautification act of 1965, opinion of Attorney General, 8279
 highway beautification act of 1965, review, hearings, 12311
 1967 program, print as S. doc., report, 4599
 public participation in State projects, 5477
 report on costs and economic impact, etc., 6054
 highway planning notes, 13100
 highway relocation assistance study, 16340
 highway research and development studies using Federal aid funds, 2845
 highway safety—
 act of 1966, amend. report, 16377
 act of 1966, report, 646
 acts, 1966, implementing (remarks), 7567
 construction requirements, Federal projects, 5473
 national uniform standards for State programs, 13555
 Operation 66, joint engineering-enforcement project report, 1594
 program, 1968 authorizations, hearings, 15174
 safety and beauty programs, message from the President, 5992
 standards, report from Transportation Dept., 15048
 uniform performance standards (remarks), 4453
 highway trust fund, financial condition and operations, annual report, 9059
 highways and human values, 1966 annual report, Public Roads Bureau, 5474
 supplement, 7101
 Interstate system—
 frontage road near Billings, Mont., justification, Public Roads Bureau, GAO review, 2348
 location, etc., in metropolitan areas, GAO report, 15299
 rights-of-way costs, withheld reimbursements, District of Columbia Government, GAO review, 12593
 toll facilities relationship—
 hearings, print additional copies, report, 643
 report, 14989
 logging road for BLM's Tillamook project, analysis of 2 standards, 11118
 machine-driving of wooden posts, way to reduce highway guardrail costs, 11138
 maintenance, engineered performance standards, handbook, 11625
 overtaking and passing on 2-lane rural highways, literature review, 14641
 Pan American highway network (remarks), 239
 public roads, journal of highway research (periodical), 3785, 10071
 publications, price list, 10038
 research and development in highway transportation, task and study statements of national program, 8664
 retaining walls, reinforced concrete, cantilever and counterfort types, typical plans, 18194
 road inventory manual of instructions, guide, 17177
 rock cuts, presplitting, controlled blasting technique, 5476
 scenic roads & parkways, proposed program, 7049

Roads and highways—Continued
 statistics, 11766, 13101
 wetland road crossings, drainage problems
 and timber damage, 14097
see also names of roads or highways.
 Roane County, W. Va., William Kaufman
 lease Clover-Rush Run oilfield, reservoir
 study, 14347
 Roback, R., rocket engines using gaseous
 hydrogen, 6719
 Robbins, Chandler S.:
 birds and aircraft on Midway Islands,
 1959-63 investigations, 4809
 breeding bird survey, 12550
 Robbins, Otis, Jr., Flathead Lake (Mont.)
 fishery investigations, 4811
 Robbins, William M., Jr.:
 feasibility of orbiting 1500-meter radio-
 telescope, 11414
 gratings and networks of ribbons as radio
 reflectors, 16902
 spinning paraboloidal tension networks,
 16903
 Robert, Alice L., bacterial wilt and Stewarts
 leaf blight of corn, 5626
 Roberts, Eugene, toxicologic studies of acute
 hydrazine toxicity in mice, 4183
 Roberts, Jean:
 binocular visual acuity of adults, etc.,
 13099
 hearing levels of adults by race, region,
 etc., United States, 17168
 Roberts, P. J., industrial evaluation of radia-
 tion processed wood-plastic composites,
 5780
 Roberts, Sean C., XV-11A, description and
 preliminary flight test, 11997
 Roberts, T. D., area handbook for Domini-
 can Republic, 11990
 Roberts, Travis, annual report for 1966,
 cooperative fishery units, 16626
 Roberts, Vanda K., bibliography of publica-
 tions by Intermountain Forest and Range
 Experiment Station on genetics and breed-
 ing of forest trees, 4827
 Robertson, A. Willis, tributes on birthday
 and retirement as Senator, 2079
 Robertson, Eugene C., interior of the earth,
 elementary description, 1114
 Robertson, J. B., proton bombardment of
 high-purity single-crystal silicon, 11534
 Robertson, J. L.:
 addresses, etc.—
 Dec. 5, 1966, 2263
 July 11, 1967, 12531
 Robertson, William G.:
 man during 56-day exposure to oxygen-
 helium atmosphere, respiratory function,
 92
 man in oxygen-helium environment, res-
 piratory, 80
 Robie, Richard A., selected X-ray crystallo-
 graphic data, molar volumes, and densities
 of minerals and related substances, 17818
 Robinson, George B., heterodyne phase shifter
 with inductive delay line pickup provides
 stepless phase shift, 16977
 Robinson, Harold, revision of genus *Harmas-
 tonia* (Diptera, Dolichopodidae), 12999
 Robinson, James F., making and preserving
 apple cider, 13222
 Robots:
 serve as museum guides, USSR studies,
 17867
 underwater electronic, development for
 ocean research, USSR study, 6568
 USSR studies, 8246
 Rocuss saxatilis, *see* Bass.
 Rock Creek Park, creek and the city, urban
 pressures on natural stream, 4913
 Rock Island, Ill.:
 area wage survey, 6606
 bridge across Mississippi River, recon-
 struction, etc., authorize construction of
 additional span, report, 2095

Rock Run, Ala., geology and bauxite de-
 posits, 9561
 Rocket fuel, *see* Fuel.
 Rocket propellants, *see* Propellants.
 Rockets:
 acoustic oscillation in simulated rocket
 combustion chambers, mechanical ab-
 sorption, 3264
 acoustic prediction methods for rocket
 engines, 1422
 Aerobee—
 150 propulsion failure, causes, etc., 6851
 sounding, NASA launching for 1964,
 compendium, 15554
 Apollo/Saturn V replica model, design
 and fabrication considerations, 16988
 atmosphere investigation, methods, 6911
 axial-flow liquid-core nuclear rocket em-
 ploying radiation heat transfer, heat-
 and mass-transfer characteristics, 14497
 booster, large, propellant dynamics, or-
 bital investigation, 11517
 clustered engines and deflected exhaust
 flow effects, 1422
 cold solid propellant motor has stop-re-
 start capability, 6830
 controlled release device prevents damage
 from dynamic stresses, 6790
 cooling motor with injection near throat,
 6882
 device measures reaction engine thrust
 vector deviations, 6804
 engine asymmetric loads during tests at
 sea level, elimination, 6831
 engine vibration accurately measured by
 photography, 6812
 engines, storable-propellant, ablative-ma-
 terial thrust chambers as components,
 evaluation, 15555
 exhaust-nozzle performance, computer pro-
 gram for determining effects of chemical
 kinetics on, 15575
 fluorine and fluorine-oxygen mixtures in
 rocket systems, handling and use, 11425
 gaseous core nuclear rocket mixing, char-
 acteristics using cold and arc heated
 flows, simulation, 12848
 gaseous-hydrogen-liquid-oxygen combus-
 tion at supercritical chamber pressures,
 17001
 gaseous nuclear engine—
 radiant heat transfer in fuel region, 5183
 temperatures, local and average fuel
 estimates, 16998
 hot exhaust gases, surface heating rates
 and pressures, predicting, 6795
 hydrogen-fluorine engines, regeneratively
 cooled, heat-transfer study at low cham-
 ber pressure, 17006
 M-1 engine subscale injector tests, 12959
 M-1 hydrogen-oxygen engine, fuel pump
 turbine, cold-air performance evalua-
 tion, 6868
 meteorological research, agreement with
 Canada, 5548
 meteorological rocket network firings, data
 report (periodical), 1032, 3190
 near field noise, prediction, 14400
 nuclear—
 cold-flow test facility, cooldown char-
 acteristics of regenerative nozzle
 used, 11500
 controls analysis of engine at power
 range operating conditions, 11525
 convectively cooled nozzle, design and
 evaluation, application of digital
 codes, 5269
 engines using gaseous, hydrogen at stag-
 nation temperatures up to 200,000 R.
 theoretical performance, 6719
 frequency response and transfer func-
 tions obtained from analog computer
 simulation, 11526
 liquid core, radiant heat transfer, po-
 tential performance, 18016

INDEX 1967

Rockets—Continued
 nuclear—continued
 mapping tungsten-reactor engine as
 guide to operation and control, 9876
 tungsten water-moderated, design of re-
 generatively cooled nozzle, 2729
 proportional solid propellant secondary in-
 jection thrust vector control study,
 2604
 ramjet and rocket-ramjet hybrid engines,
 nonconstant area combustion and mix-
 ing, analysis, 1478
 Saturn, matrix-Holzer analyses for fully-
 coupled vibrations of clustered launch-
 vehicle configurations, 5158
 Saturn V—
 launch, far-field acoustic environmental
 predictions, 16981
 manned flight to moon, NASA facts,
 12878
 screech in hydrogen-oxygen rockets, acous-
 tic liners to suppress, 6870
 single-stage sounding, static stability in-
 vestigation, 12933
 slosh dynamics study in near zero gravity,
 vehicle description, 11530
 solid control, subliming—
 phase 1, 8412
 phase 2, 8413
 solid propellant motors—
 performance computer programs using
 group transformation method, 1483
 structural dynamics, 2611
 sounding rocket vehicle, static stability in-
 vestigation at Mach numbers from 1.50
 to 4.63, 12934
 sounding, techniques (paper), 6913
 static stability, effects of jet pluming,
 14467
 ballistic bodies at Mach number of 6.00,
 2691
 Trailblazer I reentry bodies, light-inten-
 sity data, summary, 2690
 unguided solid fuel vehicle with solar or-
 bit, earth probe, and re-entry mission
 capabilities, feasibility and parametric
 design, 12853
 unmanned, Federal aviation regulations,
 10997
 unregulated low-thrust engine, minimum
 time for Earth-Mars-Earth flight, USSR
 study, 17881
 X-258 3d-stage motor, performance on
 Delta 36 (OT-3), 14460
 Rockford, Ill., area wage survey, 14289
 Rockland County, N.Y., population, special
 census, 8949
 Rocks:
 California, central, petrology of sediments
 underlying areas of land subsidence,
 12607
 Cambrian and Ordovician, east-central
 Alaska, stratigraphy, 6404
 Cambrian and Precambrian of Groom dis-
 trict, Nev., 14169
 common types, trace elements, importance
 in neutron-induced radioactivity calcu-
 lations, 1799
 Cretaceous and Tertiary, Corozal Quad-
 rangle, Puerto Rico, 1112
 dielectric constants and dissipation fac-
 tors for 6 types between 20 and 100
 megahertz, 9765
 explosives in rock, performance, methods
 for studying, 5124
 gravity loaded, stresses and displacements
 surrounding open pit, 14356
 hydrologic and physical properties as an-
 alyzed 1948-60, summary, 8182
 low temperature reaction zones and alpine
 ultramafic rocks of California, Oregon
 and Washington, 17817
 Mono Craters quadrangle, Calif., structure
 and metamorphism, 4887
 outcrops, stresses, near Atlanta, Ga., 1409

Rocks—Continued
 pendulum sclerometer for surface hardness
 studies, 11381
 permeability curves of concern to oil reser-
 voir engineers, 14360
 Permian units in Glass Mountains, west
 Texas, nomenclature, etc., 1113
 petrographic methods, use for reexamina-
 tion of nonmagnetic taconite occur-
 rences, 14346
 petrology—
 and structure of Precambrian rocks,
 Central City quadrangle, Colo., 12611
 Greenville quadrangle, Piscataquis and
 Somerset Counties, Maine, 16684
 Morrison formation in Colorado Plateau
 region, 12613
 porous permeable, for nuclear waste dis-
 posal, 9778
 presplitting, controlled blasting technique,
 5476
 pressure—
 deep mine stress determinations using
 flatjack and borehole deformation
 methods, 6676
 stress distribution near explosively ex-
 panded rock bolt anchors, 5126
 rock movement in large-scale tests of
 riprap stability under wave action,
 16520
 stress—
 determinations, anisotropic considera-
 tions, 12818
 ellipsoid determination in rock-burst-
 prone area, 14351
 use of 3-component borehole deforma-
 tion gage for determining, 15481
 Upper Cretaceous and Tertiary, stratigra-
 phy and regional tectonic implications,
 east-central San Juan Basin, N. Mex.,
 16693
 see also Sedimentary rocks.
 Rockwell, T. H., work injuries and accident
 causes in concrete brick and block indus-
 try, 16813
 Rockwell-Standard Corporation, adjustment
 assistance case pertaining to certain work-
 ers, excerpts from Tariff Commission re-
 port to Automotive Agreement Adjustment
 Assistance Board, 7206, 17258
 Rocky Mountain Forest and Range Experi-
 ment Station, publications, list, 3515
 Rocky Mountain National Park, general in-
 formation, 9964
 Rocky Mountains:
 cherries, growing east of Rocky Mountains,
 5628
 southern and central, site, index table for
 aspens, 5628
 Rodents, ethology, with emphasis on evolu-
 tion of social behavior, comparative study,
 15603
 Rodgers, William, or heirs, relief, 610
 Rodgin, David W., study of man in oxygen-
 helium atmosphere, behavior factors, 86
 Rodin, Ervin Y., propagation of waves of
 finite amplitude in thermoviscous media,
 1434
 Rodriguez, Antonio J. F. Senra, see Senra,
 Antonio J., and wife.
 Rodriguez, Gonzalo G., relief, 12352, 16214,
 17515
 Rodriguez, Guillermo, relief, 574
 Rodriguez, Julio Valdes, see Valdes-Rodri-
 guez, Julio.
 Rodriguez, Olibio S., relief, 339
 Rodriguez, Ubaldo G. Catusas, see Catusas-
 Rodriguez, Ubaldo G.
 Rodriguez-Cubas, Fidel, relief, 327, 616, 870
 Rodriguez-Fernandez, Manuel, relief, 10715
 Rodriguez Perez, Ortelio, relief, 635

Rods:
 compos
 filler
 yttrium
 man
 see also
 Rec. Art
 proceed
 seed
 produ
 fore
 Roentgen
 Roentgen
 manus
 Roethlis
 ureme
 Roger M
 water
 reserv
 Rogers,
 midwa
 Rogers,
 and u
 Rogers,
 Rogers,
 junio
 Rogers
 1609
 Rogerso
 in an
 Hawa
 Rohl, G
 tive o
 Rohrer,
 Peak
 Comm
 Rojas-M
 12216
 Rojas-V
 17503
 Roll:
 contr
 int
 stabl
 son
 Roll-ba
 Fede
 Rolla J
 chan
 lav
 re
 Rollag,
 froze
 Rolling
 1772
 Rolston
 in
 post
 Roman
 Rondir
 Rondor
 vious
 Roofers
 Roofin
 asph
 3:
 farm
 then
 bu
 Rooms
 NAF
 env
 Roese
 trib
 in
 r
 Roose
 por
 Root,
 com
 Root
 hea

- Rods:**
 composite weld rod corrects individual filler weaknesses, 9862
 yttrium iron garnet, study reveals new magnetostatic echo mode, 12889
see also Ground-rods.
- Roe, Arthur L.:**
 procedure for forecasting western larch seed crops, 4828
 productivity indicators in western larch forests, 9535
- Röntgenograms, *see* X-rays.**
- Röntgenology, military, Army technical manual, 10279**
- Roethlisberger, Hans, ultrasonic pulse measurements in anisotropic lake ice, 1754**
- Roger Mills County, Okla., Sandstone Creek watershed, hydrologic effects of small reservoirs, 2376**
- Rogers, George B., competitive position of midwestern egg industry, 5651**
- Rogers, James F., staffing American colleges and universities, 7913**
- Rogers, John W., relief, 13732**
- Rogers, Lola E., science teaching in public junior high school, 7909**
- Rogers County, Okla., soil survey report, 1609**
- Rogerson, J. E., airborne field measurements in antipodal region of radio station NPM. Hawaii, 5345**
- Rohl, G. E., effects of jet fuel anti-icing additive on fuel tank linings, 9991**
- Rohrer, Willis L., geology of Adam Weiss Peak quadrangle, Hot Springs and Park Counties, Wyo., 2360**
- Rojas-Machado, Miguel A., relief, 9193, 12210, 12143**
- Rojas-Vila, Enrique A., relief, 13742, 16189, 17503**
- Roll:**
 control of jet VTOL aircraft, free-stream interference effects, 14478
 stability derivatives of variable-sweep tactical fighter model at subsonic and transonic speeds, 6887
- Roll-bar structure for automotive vehicle, Federal standard, 6333**
- Rolla Jewel Bearing Plant:**
 change name to William Langer Jewel Bearing Plant—
 law, 488
 report, 2091
- Rollag, Norman L., market potentials for frozen dough, 7277**
- Rolling mills, industry manpower survey, 17729**
- Rolston, John A., Air Force basic research in high-performance filamentary composites, 15890**
- Romania, *see* Rumania.**
- Rondinelli, Antonina, *see* Asci, Antonina R.**
- Rondon Delgado, Antonio, relief, 323, 869**
- RONDOVU/PRESTO, program for rendezvous mission trajectory optimization, 5179**
- Roofers, safe work guide, 11306**
- Roofing:**
 asphalt and tar, current industrial reports, 3169, 5554
 farm buildings, general information, 13223
 thermal-shock resistance for built-up membranes, 15584
- Rooms, clean rooms and work stations, NASA standards for microbially controlled environment, 15522**
- Roosevelt County, Mont.:**
 tribal land, transfer of title—
 law, 12166
 reports, 10579, 12361
- Roosevelt County, N. Mex., soil survey report, 11810**
- Root, Robert T., analysis of interpreter-computer reporting techniques, 7403**
- Root River, water pollution, control, etc., hearing, 738**
- Roots:**
 distribution in different soil types, Pine Barrens, New Jersey, 6408
 pruning, mahogany nursery stock, 12572
- Rope:**
 Federal item identification guides for supply cataloging, supplements, 3287
 types, selection, characteristics, etc., and preparation for use on farm, 4103
- Roper, Clyde F. E., reviews of Vallybuteuthidae and evaluation of its relationship with Chlorteuthidae, etc., 14538**
- Roper, Willard, nomination, hearing, 16433**
- Rose, Donald J., rounding error bounds by perturbation-condition analysis, 16978**
- Rosen, Joseph S., approximate solution of Runge-Kutta equations, 15563**
- Rosenbaum, Richard C.:**
 digital computer program for trajectory optimization, 6717
 PRESTO version delta, 5178A
- RONDOVU/PRESTO, program for rendezvous mission optimization, 5179**
- Rosenberg, Ronald C., computer-aided teaching of dynamic system behavior, 62**
- Rosennecker, Charles N., power required to circulate gas-solids suspensions, 15483**
- Rosenstock, Herbert B., magnetically induced nonequilibrium electron temperatures, 9995**
- Roses, production and sales, etc., 10108**
- Roshore, Edwin C.:**
 durability and behavior of prestressed concrete beams, investigation, 9424
 freezing-and-thawing tests of concretes of various strengths and air contents, 13986
 investigation of performance of concrete and concreting materials exposed to natural weathering, 6214
- Rosin, *see* Naval stores.**
- Rosofsky, Rose G., earnings mobility of MDTA trainees, 11296**
- Ross, Donald C., stratigraphy of Paleozoic formations in Independence quadrangle, Calif., 2364**
- Ross, Jack S., feed statistics through 1966, feed grains, corn, etc., 17333**
- Ross, Reuben J., jr.:**
 calymenid and other Ordovician trilobites from Kentucky and Ohio, 16698
 Middle Ordovician brachiopods, etc., from basin ranges, 11174
- Ross, W. James, soil survey of Roosevelt County, N. Mex., 11810**
- Ross Lake National Recreation Area:**
 establish—
 hearings, 15163
 report, 17631
- Rossettos, John N., deformation of shallow spherical sandwich shells under local loading, 6895**
- Rossi, Maria, relief, 256, 859**
- Rossing, Robert G., computer solution of exponential decay or washout curves, 15894**
- Rossow, Vernon J., time-dependent structure of one-dimensional magnetic compression waves in collisionless plasmas, oblique ambient magnetic field, 11508**
- Rosters, National Cancer Institute, staff, advisory bodies, and consultants, 7089**
see also names of departments, etc., issuing rosters.
- Rostow, Eugene V., address, Sept. 11, 1967, 18232**
- Roswell, N. Mex., brackish water conversion demonstration plant, report, 16718**
- Rot, lodgepole pine butts, potential hazard in recreational areas, 1093**
see also name of rot.
- Rotation, Army manpower rotation policy, models, 7404**
- ROTC, *see* Reserve Officers' Training Corps, Navy.**

INDEX 1967

Roth, Emanuel M.:
 space-cabin atmospheres—
 engineering tradeoffs of one-vs. 2-gas
 systems, 12879
 physiological factors of inert gases,
 9823
 Roth, J. Reece, plasma stability and Bohr-
 van Leeuwen theorem, 8495
 Roth, Rodris, floor coverings in 18th century
 America, 14530
 Roth, William M.,
 addresses, etc.—
 July 7, 1967, 14663
 Oct. 10, 1967, 18219
 Oct. 31, 1967, 18220
 nomination, hearing, 6107
 Rothe, W. E., encasement for emergency den-
 tal kit for use on space missions, 17353
 Rothermel, Richard C., fire spread charac-
 teristics determined in laboratory, 4847
 Rotocraft:
 airworthiness standards—
 normal category, Federal aviation regu-
 lations, 14003
 transport category, Federal aviation
 regulations, 4757, 12493
 Rotors:
 air loads, blade motion, and stress caused
 by transient inputs of shaft torque as
 related to stoppable rotor operation,
 13308
 comparison of flight-measured chordwise
 distributions with static 2-dimensional
 airfoil characteristics, 11502
 helicopter hingless rotor system, struc-
 tural loads encountered, exploratory
 flight investigation and analysis, 1487
 helicopter rotor noise reduction, tip vor-
 tex core thickening, application, 4220
 hot cycle system—
 heavy lift helicopter, preliminary
 design, 10288
 tether test and teardown inspection,
 results, 7410
 hovering performance characteristics with
 and without blade-pitch servo-control
 flaps, 5260
 inlet flow conditions, use of variable-
 geometry guide vanes to control, 5275
 performance, generalized, 7411
 propeller-rotor whirl flutter, review,
 12971
 rings, high reluctance, improve homopolar
 generator performance, 5153
 rotor-bearing systems, dynamic stability,
 1439
 rotor blade of rotor entry vehicle model,
 heat-transfer measurements, 12965
 transient blade motions of rotor with
 flapping and lead-lag degrees of freedom,
 numerical method for studying, 17010
 UH-1 helicopters tall rotor, laminated
 elastomeric bearings, evaluation, 17389
 Rough Rock Demonstration School, giving
 education back to the Indians, 9400
 Roughness, see Land.
 Roughness characteristics of natural chan-
 nels, 17833
 Roumasset, Charles A., Negro in the West,
 15453
 Rounding error bounds by perturbation-
 condition analysis, 16978
 Rounds, Donald E., photoactivation of
 smooth muscle with ruby laser, 17362
 Rounsefell, George A., red-tide research
 summarized to 1964 including annotated
 bibliography, 9520
 Rous sarcoma virus, see Viruses.
 Rouse, Carl A., accurate and stable numerical
 solutions to Schrödinger equation, 17090
 Rouse, George C., vibration studies of Mon-
 ticello Dam, 17181
 Route reconnaissance and classification, 1757
 Routh, Guy, review essay, evolution of an
 economist, 1616

Rowland, James A., platinum-group metals,
 5122
 Rowland's preliminary table of solar spec-
 trum wavelengths revision, 1522
 Rowntree, R., EXIM bank, export financing,
 6232
 Roy, Douglass F.:
 silvical characteristics—
 Monterey pine, 8113
 redwood, 4853
 Roy, John W., relief of estate, 269, 806
 Roy, Rob. system identification and pattern
 recognition, 9810
 RSFSR, see Russian Soviet Federated So-
 cialist Republic
 Ruark, Arthur E., how to understand
 special relativity, 13346
 Rubber:
 crystallization of natural rubber (lecture),
 9835
 infrared spectra of elastomers, 15636
 rubber-processing chemicals, production
 and sales, 15807
 supply and distribution for U.S., current
 industrial reports, 3169, 12078
 working machinery, industrial plant
 equipment handbook, 7849
 Rubber hose, see Hose.
 Rubenfeld, Seymour, typological approaches
 and delinquency control, status report,
 17166
 Rubicola, see Measles.
 Rubino, Giuseppe, relief, 540
 Rubio Madariaga, Adela A., relief, 13750
 Ruby Lake National Wildlife Refuge, gen-
 eral information, 15261
 Ruby laser, use for photoactivation of
 smooth muscle, 17362
 Ruchwarger, Abraham, relief, 16179
 Rudduck, R. C., aperture reflection coeffi-
 cient of parallelplate waveguide by wedge
 diffraction analysis, 14382
 Rodgers, Anthony J., evaluating formulas
 describing reflection of acoustic waves by
 elastic spheres, 14594
 Rudolf, Paul O.:
 botanical and commercial range of—
 balsam fir in Lake States, 8069
 tamarack in Lake States, 8070
 Ruehle, John L., distribution of plant-parasitic
 nematodes associated with forest
 trees of world, 16645
 Rugs:
 current industrial reports, 4338, 8945,
 13393
 Wilton, Brussels, etc., Tariff Commission
 report, 15808
 Ruhe, Robert V., landscape evolution and
 soil formation in southwestern Iowa,
 14763
 Ruiz del Castillo, Antonio Martin, see Martin
 Ruiz del Castillo, Antonio.
 Ruiz-Montalvo, Irma S., relief, 12357
 Rule, Richard H., making basements dry,
 1698
 Rules, see House of Representatives—also
 names of courts, commissions, etc., issuing
 rules—also subjects.
 Rules and Administration Committee, Sen-
 ate:
 calendar, 3502
 committee print, 4659
 hearings, 961, 13854
 investigations and studies—
 privileges and elections, expenses, report,
 4611
 standing rules of Senate, authorization,
 report, 4612
 reports, 896, 916-917, 2098, 4595, 4597-
 4612, 4614-27, 6069-77, 6079-84, 9250,
 9274-76, 9278, 10741, 10781-789,
 12369-374, 13791, 13817-820, 15083,
 15098-100, 15108, 15135-142, 16362-
 363, 16359

Rules Com-
 commit-
 funds, 1
 hearing
 reports,
 658,
 700
 6008,
 7708,
 9106
 557,
 1060
 264,
 1383
 676,
 956,
 983,
 280,
 Rules of
 vestiga-
 Rules of f
 Great I
 western
 Rum, den
 Rumania
 astronia
 emy
 biolog
 9671
 Centra
 activ
 childre
 1530
 claims
 Ame
 th
 Inha
 Cluj C
 stud
 contril
 cultura
 diplom
 men
 endu
 Fundu
 Acti
 geolog
 and
 health
 higher
 role
 mathe
 119
 mlner
 cha
 Nation
 cec
 pharm
 princ
 tect
 scient
 dis
 scient
 153
 2d Na
 ing
 Socia
 dec
 exe
 study
 Union
 fer
 Runk
 Run au
 recor
 Runge-
 Runnin
 Runoff
 Runwa
 high
 snow
 Rapes
 Rupper
 sine

Rules Committee, House:

committee print, 4559
funds, providing, report, 10582
hearings, 752, 6042, 7754
reports, 620-623, 630-634, 648, 651, 653-658, 665, 673-674, 676-677, 694-698, 700, 2013-14, 2019, 4500, 4518-19, 6008-9, 6013-23, 7663, 7667, 7671-72, 7708, 7710-11, 7716-18, 9085, 9098, 9106-7, 9109, 9116, 9123-26, 10556-557, 10571-572, 10576, 10598-599, 10604, 12245-246, 12248-249, 12263-1264, 12267, 12274, 12277, 12281, 13636, 13642-643, 13661, 13664, 13674-676, 13682, 13685-688, 14951, 14954-956, 14959, 14964, 14973-974, 14982-983, 16245-247, 16256-257, 16278-280, 16285, 17574, 17579, 17582

Rules of practice and rules relating to investigations, 11783

Rules of the road:

Great Lakes, 221
western rivers, 4421
Rum, denatured, distribution and use, code of Federal regulations, 8222

Rumania:
astronomic observatory, Rumanian Academy of Sciences, activities, 1290
biological research, recent developments, 9671

Central Institute of Agricultural Research, activities, 1221
children's health protection problems, 15361
claims of—

American nationals, timely determination, hearing, 12300
inhabitants, payment, hearing, 732

Cuj City area, radioactivity of vegetation, studies, 1299

contributions to endocrinology, 14260
cultural relations, agreement, 11869
diplomatic courier visas, amending agreement, 15789

endocrinology, new horizons, 14216
Fundulea Agricultural Research Institute, activities, 10th anniversary, 9612

geological operations, planning, financing, and performance, 11252

health situation, 1240
higher education for scientific research, role, 14223

mathematical statistical center activities, 1195

mineral industry, minerals yearbook chapter, 6665

National Congress on Stomatology, proceedings, 12732

pharmaceutical development, 15391
principle of prophylaxis in health protection, 1160

scientific information and documentation, dissemination described, 14222

scientific research, economic efficiency of, 15381

2d National Symposium on Genetics, meetings, 12703

Socialist Republic Council of Ministers, decision on planning, financing, and execution of geological work, 12735

study mission report, 7809

Union of Medical Science Societies, conference results reported, 14274

Rumker LAC 23, lunar chart, 10226

Run numbering system for use with data recorders, 12918

Runge-Kutta method, *see* Equations.

Runningawayness, 8045

Runoff, exposure and logging effect on, 9537

Runways (aeronautics):
high intensity lighting system, 12499
snow construction, role of sintering, 15930

Rupes Altai, LAC 96, lunar chart, 7322

Ruppert, John A., refining iron-contaminated sludge by filtration and centrifugation, 5125

Rural communities:

build new rural America (remarks), 13239
career opportunities, career with Farmers Home Administration in building new rural America, 1036

civil defense, knowledge for survival, Federal Extension Service program, 3463

consumer expenditure and income 1960-61—

rural farms, tables, 2522
rural nonfarm areas, tables, 2493

total urban and rural, tables, 2494
cooperatives and rural-urban balance (remarks), 13220

Farmers Home Administration strengthens, 5670

interlocal governmental cooperation, study of 5 States, 13942

issue of rural development, communities of tomorrow (address), 4108

need for rural-urban balance (address), 7280

rental & co-op housing loans, 10194
rural opportunities, war on poverty (periodical), 3842

rural people in American economy, 983
rural poor, aspirations and expectations, guide to research, 17710

rural poverty, hearings before National Advisory Commission on Rural Poverty, 15698, 17126-127

small towns and rural groups, Oklahoma, financial assistance for water systems and waste disposal systems, questions and answers, 7945

statistical summary, rural areas development and area redevelopment, quarterly progress report, 3903

VISTA serves rural America, 6168
see also Country life.

Rural Community Development Service, appropriations, 1968, hearings, 10629

Rural conditions, *see* Country life.

Rural development program:
Asia, hearings, 7745, 13705

community development district act of 1966, planning of public services, etc., report, 622

community development district act of 1967, planning of public services, etc., report, 10748

industrialization in Ozarks, case study, 17711

issue of rural development, communities of tomorrow (address), 4108

newsletter, 3841

Project Seesaw, beginning for rural disadvantaged in Louisiana, 8284

rural youth clubs around world, handbook for developing programs, 16570

Rural Electric Bank:
establish—

hearings, 10625
report, 13659

Rural electricity, *see* Electricity.

Rural Electrification Administration:
annual report, 11778

appropriations, 1968, hearings, 10629, 12397

materials acceptable on—
electrifications systems, list, 3512

telephone systems, list, 3513

REA borrowers—
electrification systems, materials acceptable for use, list, 8672, 17187

energy purchased, 1966, report, 10074

telephone systems, list of materials acceptable, 13111

REA bulletins, 1597, 7105, 10074, 17189-190, 18200

REA programs, financing, supplemental, hearings, 938

statistical bulletin, quarterly, 3800-1

INDEX 1967

Rural Electrification Administration—Con.
statistical report—
rural electrification borrowers, 18199
rural telephone borrowers, 2849
Rural families, *see* Families.
Rural housing, *see* Housing.
Rural life, *see* Country life.
Rural mail carriers, *see* Mail carriers.
Rural population, potential supply and replacement of rural males of labor force age, 1721
Rural poverty, *see* Poverty.
Rural Poverty, National Advisory Commission on, *see* National Advisory Commission on Rural Poverty.
Rural redevelopment:
renewal authority under Bankhead-Jones farm tenant act, broaden—
law, 500
report, 910
statistical summary, rural areas development and area redevelopment, quarterly progress report, 3903
Rural social science, *see* Sociology.
Rural Telephone Bank:
establish—
hearings, 10625, 17585
report, 13659
Rural telephone programs, *see* Telephone.
Rural workers, *see* Farm labor.
Rural youth, *see* Youth.
Rural zoning, why and how, 15838
Rush-Bagot Agreement Days:
designate, Apr. 28-29, 1967—
law, 10481
report, 9290
Rusk, Dean:
addresses, etc.—
Aug. 25, 1966, 1628
Sept. 21, 1966, 1629
Oct. 12, 1966, 2882
discussion from news conference, Oct. 12, 1967, 18229
Rusk, Willard H., relief, 16176
Russell, Charles M., National Wildlife Range, *see* Charles M. Russell National Wildlife Range.
Russell, G. M., market information on electronic products in Australia, 16105
Russell, Graham, hollow cathode plasma penetration study, 2612
Russell, Harold, remarks, Sept. 27, 1967, 17125
Russell, Joe L., Negro's occupational progress, 16829
Russell Cave National Monument, general information, 5320
Russfield, Agnes B., tumors of endocrine glands and secondary sex organs, 2841
Russia, *see* Union of Soviet Socialist Republics.
Russian accessions, Library of Congress monthly index, 3575
Russian language, USAFI study guide, 974
Russian River:
flood control, etc., engineer report—
departmental edition, 4737
document edition, 4476
Russian Soviet Federated Socialist Republic:
oncological service, improving, 2477
public education, USSR study, 12761
Russo, Michael, area vocational schools, 4707
Rust (plant diseases), *see* Fusiform rust—
Limb rust—Sweetfern blister rust.
Rutabagas, production, 4111
Ruth, William M., address, Oct. 5, 1967, 18218
Ruthenium, sliding friction, 15578
Ruzicka, Jerome E., damping of structural composites with viscoelastic shear-damping mechanisms, 6728
Rwanda:
background notes, 15760
Burundi boundary, study, 1632
labor conditions, 8320

R legend, FDA manual for pharmacists, 6360
Ryan, Elizabeth, request oriented information selection program, 8506
Ryan, J. Patrick:
gold, 6634
silver, 2589
Ryan, Margaret F., psychology, bibliography, 11959
Ryan, Michael J., indirect calorimetry in low pressure environments, 11957
Rye:
crop production, 2938
futures—
commitments of traders, 3112
trading and open contracts, 3368
Ryerson, C. M., diode reliability prediction technique, 6720
Ryker, Russell A.:
herbicides fall to insure success of brush-field prescribed burn, 6366
thinning and fertilizing increase growth in western white pine seed production area, 6367
Ryerson, Garn A.:
mineral industry of—
Brazil, 16857
British Guiana, 14330
Surinam, 8366
Ryukyu Islands:
appropriations, 1967, law, 405
appropriations, 1968, hearings, 15014
bibliography, 10267
economic and social development, increase appropriations—
hearings, 16309
report, 16281
military personnel of U.S. Army ordered to helpful hints, DA pamphlet, 7388

S

S.A.M., *see* School of Aerospace Medicine.
S.B.A., *see* Small Business Administration.
S.C.S., *see* Soil Conservation Service.
S.E.C., *see* Securities and Exchange Commission.
Saad, George J., relief, 544
Saalfeld, F. E., gas-chromatographic-mass spectrometric methods of analysis, 13033
Saari, J. M., isothermal and isophotic atlas of moon contours through lunation, 16894
Sabghir, Aaron, construction review, monthly industry report, 3139
Sabo, J. J., scientific information retrieval system for research grants, Division of Radiological Health, 7064
Sabotage, laws, compilation, 1987
Sac and Fox Indians:
judgment funds, disposition—
law, 16136
reports, 14950, 15119
Sackley, Arthur, long-term trends in urban teachers' compensation, 5080
Sacks, Alvin H., aerodynamics of slender wing-body combinations exhibiting leading-edge separation, 8415
Sacks, *see* Bags.
Sacramento Valley Canal unit, *see* Central Valley project.
Sacramento Valley National Wildlife Refuge, and others in area, mammals, list, 8030
Safe lifting, 6601
Safety at sea, *see* Safety of life.
Safety equipment and appliances:
construction safety requirements, Federal highway projects, 5473
door latches and hinges for automotive vehicles, Federal standard, 6319
safety in industry, instructor outline, personnel protective equipment, 8298
Safety in the air, *see* Safety of life.
Safety inspectors, examination announcement, amdt., 1915

Safety of Air Navigation in Africa and Madagascar, air transport services for United States Government aircraft, agreement, 15781

Safety of life:

aerospace maintenance safety, 2992
air safety—
aerospace safety (periodical), 2993
aircraft basic restraint systems, functional comparison, 17413
civil aviation (remarks), 18092
decompression hazards in small pressurized aircraft, 17414
emergency evacuation tests of crashed L-1649, 10321
emergency procedures over water, 3016
low-level operational hazards, 4223
naval aviation safety review, 3036
night flying of helicopters over mountains, guidance systems tested, 8089
shoulder restraint installation in general aviation aircraft, recommendations, 7446
violation investigation and reporting, FAA handbook, 2233
AMC safety manual, 14789, 15929
Army Security Agency command safety program manual, 15934
at sea, disclosure of and upgrading safety standards—
hearings, 744
law, 481
at sea, international convention, 1960, amendments—
report, 7773
text, 6062
at sea, rectification to certain annexes to convention between U.S. and other governments, 15792
atomic energy program—
fast reactor transient response and safety in selected accidents, 5772
fission product nuclides, identification for radiological dose calculations, following reactor accident, 13349
licensing of power reactors, 10309
low-level radioactive waste containers in accident environment, investigation, 8909
nuclear criticality safety, attitudes, past and future (remarks), 1813
routine surveillance of radioactivity around nuclear facilities, 7065
child protection act of 1966—
hearings, 2112
law, 466
Coast Guard Auxiliary examination program, courtesy examiners handbook, 5947
conducting job hazard analysis, 16799
construction industry work guides, 11302-306
construction of radiation-safe structures investigated, USSR study, 6523
construction safety requirements, Federal highway projects, 5473
critical parameters of fissionable materials systems, and nuclear safety, USSR book excerpts, 15408
development of safety movement, industrial revolution, early legislation, etc., 9698, 16809
drownproofing can save your life, 1718
drug safety, hearings, 2047
print additional copies, report, 644
electrostatic hazards in fluid system, test instrumentation for evaluating, 11474
elements of safety program, occupational safety aid, 9699, 16800
environmental aspects of hospital, safety fundamentals, 15690
families on guard against accidents, 18163
farmers' checklist for pesticide safety, 5668

Safety of life—Continued

farms, National Safety Week, keep your sights on safety, safe use of firearms, facts, 10187
FDA's life protection series, 9522-23, 12561-562, 15272
Federal Fire Council film library, list, 14164
Federal Item Identification guides for supply cataloging, supplements, 3287
fire research and safety act of 1967—
hearings, 10825, 13715
reports, 14934, 15103, 16257
general requirements, Army Engineers Corps manual, 10956
good housekeeping for successful safety program, occupational safety aid, 12766, 16801
highway safety—
act of 1966—
amend, report, 16377
report, 646
action program, 3 phases of control for safety (address), 4423
everybody's business (remarks), 5475
legislation, 89th Congress (remarks), 1952
national uniform standards for State programs, 13555
Operation 66, joint engineering-enforcement project report, study, 1594
overtaking and passing on 2-lane rural highways, 14641
program, 1968, authorizations, hearings, 15174
program standards, reports, 14524, 15048
State program (remarks), 1963
transition (remarks), 1940
what can be done about its many problems (remarks), 5959
how safe is our food? 9523
hurricane safety rules, 16534
ILO recommendations concerning conditions of employment of young persons in underground mines, 16160
industrial safe practices—
drill presses, 9726
electrical equipment, 9724
grinding wheels, 9723
hand trucks, 9721
ladders, 9725
power trucks, 9722
industrial safety in construction industry (series), 1357
industrial safety in D.C., amend law—
hearings, 16320
report, 16296
inspecting for safe use of portable electric equipment, 6602
inspecting for safety, 9702, 16803
interstate natural gas pipelines, hearings, 6093
Labor Dept. safety programs—
chemical safety data sheet, CDS LS series, 9682-83
off the job safety, OJS LS series, 16810
Labor Dept. training programs—
how to inspect chart, HTIC LS series, 9684-95, 11308
effective use suggestions, 11307
occupational safety aid, OSA LS series, 6601, 9697-9720, 12766, 16798-809
occupational safety charts, 9721-27
student reference, SR LS series, 6602, 9731-32
technical reference, TR LS series, 9733-41
longshoremen, suggested safe practices, 12767
marine safety and seamen's welfare act of 1967, draft bill, supplement, 16404
maritime safety digest (periodical), shipyards, 3542
meaningful protection for American traveling public (remarks), 6258

INDEX 1967

Safety of life—Continued

measures for providing safe working conditions during calson operations described, USSR study, 6524

mine safety—

Federal coal mine safety act as amended, title 1 and title 2, text, 16852

Federal metal and nonmetallic mine safety act, report, 647

poor safety measures and work methods at USSR mines, 2478

mineral industries, injury experience, employment and worktime, 8342, 15465

motor vehicle safety—
defect recall campaigns reported by manufacturers, 18086

Initial Federal safety standards, Jan. 31, 1967, report on development, 9024

responsibility act of District of Columbia, amend, report, 17623

standard safety devices, Federal standard, 4796

motorcycling fun and personal protection, 17174

natural gas pipeline regulations, hearings, 16403

notice to mariners, 3641, 7007

nuclear and safety experience analysis, summary and conclusions, 12007

nuclear power plants, operating and safety experience analysis review, 13327

nuclear safety, quarterly technical progress review, 3645

office safety, occupational safety aid, 9703

pleasure craft, safety suggestions, 220

preventive maintenance as an aid to safety, 9720

promoting worker interest, 9704

protection of human life from drugs, hearings, 16325

publications, price list, 17135

radiography license applications, guide, 15957

reclamation safety news (periodical), 3811

recreational boating safety, hearing, 17603

safe lifting, 6601

safe practices, chart, freight elevators, 9727

safe working loads of rigging gear and equipment, technical reference, 9733

safeguarding machinery, occupational safety aid, 9705

safety aboard ship, 5091

safety and special radio services, FCC applications and actions, 3269

safety committee activities, 9715, 16806

safety digest, AMC pamphlet, 3843

safety engineering in painting and varnishing shops, USSR book excerpts, 15363

safety in industry, instructor outline—

accident investigations and records, 8291

construction safety, site clearing, 17887

consultative approach for safety promotion, 16797

fire and explosion prevention and protection, 8295

handling materials safety, 9681

housekeeping for safety, 6599

illumination for safety, 8296

inspection procedures, 8290

job hazard analysis, 14280

personal protective equipment, 8298

planning layout and arrangement for safety, 8292

preventive maintenance for safety, 8293

promoting worker interest in safety, 8288

responsibility for safety, 8287

safe working surfaces, 8294

Safety of life—Continued

safety in industry, instructor outline—
continued

safety organization, 8289

use of color for safety, 8297

safety in industry, maritime safety data for shipyards shipboard ventilation for hazardous atmospheres, 8299

safety of large volume parenteral solutions, national symposium proceedings, 15275

safety precautions for explosive-loaded items, military standard, 13923

safety program projects, suggestions, 9706

safety review, Navy Department (periodical), 3844

safety standards (periodical), 3845

safety standards activity, 1965 highlights of occupational standards and codes, 2490

safety standards, occupational safety aid, 9707

safety training techniques in the classroom, 9716, 16807

ship repairing regulations, 9728

shipbreaking regulations, 9729

shipbuilding regulations, 9730

space flight safety, survey, 9171

spacecraft test personnel, use of remotely operated high pressure valve to protect, 15551

State safety code activity, 1965-66, highlights, 6600

State safety code comparison studies, 5053

supervisory responsibility for safety, 9717, 16808

tire research related to safety (lecture), 9946

tornado safety rules, 7938, 13992

traffic and motor vehicle safety act of 1966, report, 645

traffic safety act of 1966, amend relative to application to limited production of motor vehicles, hearing, 17647

traffic safety, Federal role, hearings, appendix, 9315

water safety, tips in, on, and around water, 15709

worker interest, promoting, occupational safety aid, 16804

Safety officers, mineral industries, examination announcement, 4392

Safety Patrol Week, see National School Safety Patrol Week.

Sagan, Hans:
dynamic programming and Pontryagin's maximum principle, 14387

Lagrange problems with variable endpoint as optimal control problems, 14386

Saguaro, description, growth characteristics, etc., 8561

Saguaro National Monument, general information, 5561

Sahil Sush coastal area, surface water and related climate features, 11189

Sahni, Roop C., prediction of ground, ionized and excited states of unknown NF molecule, 5181

Sailing directions:

Africa—

northwest, change, 7001, 17071

southeast coast, change, 9970, 18096

Australia—

East coast, change, 11636

South coast, change, 11637

Baffin Bay and Davis Strait, 9968

Baltic Sea, change, 5328

Bay of Bengal, 5329

British Columbia, change, 13018

Central America and Mexico, east coasts, change, 9969

China, change, 15630

England and Wales, west coasts, change, 8570

England, east coast, change, 11634

France, north coast, 13022

Sailing directions—Continued

Greenland, east, and Iceland, change, 14571
 India, west coast, 17073
 Indian Ocean, south, change, 14575
 Japan, northern part, change, 2771
 Kattegat and The Sound, change, 17070
 Labrador and Hudson Bay, 13020
 Malacca Strait and Sumatra, changes, 14576
 Mediterranean, changes, 15627-628, 11635, 17072, 18097
 Mexico and Central America, west coasts, 6998
 change, 15625
 New Zealand, change, 18098
 North Sea, eastern shores, change, 6999
 Norway—
 northwest and north coasts, change, 14573
 southwest coast, change, 7000
 Pacific Islands, change, 11638
 Philippine Islands, change, 7002, 8571, 15629
 Portugal, west coast, change, 7001, 17071
 Red Sea and Gulf of Aden, etc., 9971
 St. Lawrence Gulf and River, change, 13019
 Siberia—
 east coast, change, 14577
 southeast coast, and Korea, change, 11640
 Skagerrak, northern and eastern, change, 13023
 Soenda Strait and western and northeast coasts of Bornea, change, 5330
 South America, changes, 13021, 11633
 South China Sea, western shores—
 change, 7003, 11639
 Singapore Strait to Hong Kong, 17074
 Spain, west coast, change, 7001, 17071
 USSR, northern, change, 14574, 15626
 West Indies, change, 14572, 17069
 Sailing vessels, inland, Great Lakes and western rivers rules, amend, law, 468
 Sailors:
 civil relief act of 1940 and amendments, compilation, 1994
 exempt from coverage under annual and sick leave act of 1951, hearing, 4553
 Federal seafaring, additional leave, law, 459
 marine safety and seamen's welfare act of 1967, draft bill, supplement, 16404
 wages, hours of work on board ship, and manning, recommendations of ILO convention, withdrawal of treaty, text, 15064
 St. Christopher, *see* Leeward Islands.
 St. Clair, Hillary W., developing thermochemical model for iron blast furnace, etc., 14334, 17915
 St. Croix, V.L., height growth of mahogany seedlings, 12575
 St. Croix River, Maine to Little River, S.C., 14877
 St. Francis County, Ark., soil survey report, 2875
 St. Francis River:
 basin, local cooperation requirements, engineer report—
 departmental edition, 6207
 document edition, 6058
 Saint-Gaudens National Historic Site, general information, 6985
 St. George, R. A., protecting log cabins, rustic work and unseasoned wood from injurious insects in eastern United States, 5627
 St. Helena Island, decapod crustaceans, 6945
 St. Lawrence Gulf, sailing directions, change, 13019
 St. Lawrence River and Valley:
 sailing directions, change, 13019
 seaway—
 concrete in locks, investigation, 13987

St. Lawrence River and Valley—Continued

seaway—continued
 rehabilitate navigation locks, hearings, 17676
 tolls for Montreal/Lake Ontario section, lockage fee on Welland Canal, agreement with Canada, 11872
 traffic report, 8673
 St. Lawrence Seaway Authority, traffic report of St. Lawrence Seaway, 8673
 St. Lawrence Seaway Development Corporation:
 appropriations, 1967, law, 403
 annual report, 1966—
 departmental edition, 17191
 document edition, 16162
 capitalization, conversion of revenue bonds into capital stock, etc., hearings, 17676
 press releases, 3758
 rehabilitate navigation locks of seaway, hearings, 17676
 traffic report of St. Lawrence Seaway, 8673
 St. Louis, Ill., area wage survey, 8306
 St. Louis, Mo.:
 air pollution study, 5438-42, 11739
 air quality management (paper), 11716
 area wage survey, 8306
 Mississippi River and tributaries in district, stages and discharges, 13982
 St. Lucie Inlet:
 engineer report—
 departmental edition, 4738
 document edition, 4471
 St. Marks National Wildlife Refuge, birds, list, 11079
 St. Marys Falls Canal, lake commerce passing through canals at Sault Ste. Marie, Mich. and Ontario, 6208
 St. Paul, Minn.:
 area wage survey, 11313
 motor carrier accident, 4928
 St. Petersburg, Fla., area wage survey, 2505
 St. Vincent, Peace Corps volunteers, agreements, 11853
 Saker, Alexander F., relief, 303, 592, 866
 Salad dressing:
 and related products—
 current industrial reports, 12079
 industry reports, 145-146, 12028
 Salar de Atacama Basin, geology and ground-water resources of northern part, Antofagasta Province, Chile, 11164
 Salaries:
 compensation expenditures and payroll hours—
 motor passenger transportation industries, 17893
 pipeline industry, 11310
 District of Columbia—
 firemen, increase, law, 514
 police, increase, law, 514
 teachers, school officers, etc., increase, law, 514
 Federal classified and postal employees, 1945-66 increases, 4556
 Government officials and employees—
 bimonthly statistics, 2985
 classification laws, compilation, 1980
 Federal personnel manual supplement, 3305
 hazardous duty differential, increase, report, 9295
 increase, message from the President, 9069
 pay structure of Federal civil service, 16081
 salary act of 1967, hearings, 12310, 17671
 salary supplement to examination announcements, 4408, 5937, 10433
 statutory systems, annual report, appendix, 10692
 long-term trends in urban teachers' compensation, 5080

INDEX 1967

Salaries—Continued

- nonproduction employees, white-collar pay supplements, employer expenditures in private industry, 6620
- occupations in services for the blind, 2499
- professional, administrative, technical, and clerical pay, national survey, 2507
- scientist in United States, 5326
- severance benefits, payment to former Foreign Service officers of State Department, GAO report, 4873
- Smithsonian Institution executive positions, rates of compensation, establish, law, 447
- State employment security agencies, Georgia employment security agency, ensure salary comparability, procedures, need for strengthening, Employment Security Bureau, Labor Dept., GAO report, 8134
- State, salary ranges of positions in employment security, etc., 4898, 11194
- teaching faculty in universities and 4-year colleges, spring 1963, survey, 9413
- United States employees, jurisdiction of district court over actions to recover, limitation, increase, amend Tucker act, report, 15077
- see also* Payroll deductions—Wages.
- Salarinae, *see* Entomacrodus.
- Salary Commission, Joint, *see* Joint Salary Commission.
- Salazar, Robert J., French, supplementary exercises for basic course, 14675
- Salem Church Reservoir:
 - Rappahannock River, Va., engineer report—
 - departmental edition, 15227
 - document edition, 15056
- Salem Maritime National Historic Site, general information, 13009
- Saleme, Ernesto, passive geodetic satellite inflation rate study, 8426
- Salas:
 - Agricultural Stabilization and Conservation Service reports, 3848
 - aspects of sales promotion, 7109
 - building U.S. sales in expanding world market (address), 4920
 - capital assets, reported on individual income tax returns, 2411
 - department store sales—
 - by departments, monthly report, 3572
 - selected areas, monthly report, 3573
 - selected cities and areas—
 - monthly report, 3574
 - weekly percentage changes, 4057
 - export, promotion announcements, 3251
 - international, buyer's or seller's assumption of risk, Bulgarian discussion, 5013
 - large corporations, quarterly report, 3847
 - see also* names of commodities, etc.
- Sales finance companies, *see* Finance companies.
- Sales tax, District of Columbia, exempt House of Representatives majority and minority rooms, printing operations, etc., report, 9087
- Salesmen and salesmanship:
 - outside salesman, definition under fair labor standards act, 1665
 - sell your products with business proposals carried abroad by U.S. trade missions, 6466
 - selling in—
 - Canada, 16104
 - Denmark, 233
 - Finland, 10401
 - Greece, 4440
 - India, 4438
 - Sweden, 4445
 - selling to military, general information, 2158
 - training retail salespeople, bibliography, 5495

- Saline County, Ark., water resources, 8181
- Saline water, *see* Sea Water—Water.
- Saline Water Office:
 - appropriations, 1968, hearings, 7734
 - press releases, 3759
 - programs, briefing session, hearings, 10655
 - report, 11216
- Salines, composition of residues on leaves and stems of saltcedar, 6397
- Salinity, ground water of western Pinal County, Ariz., 1131
- Salisbury, Harrison E., trip to North Vietnam, hearing, 6105
- Salish Indians, *see* Flathead Indians.
- Saliva:
 - parotid fluid—
 - collection by Carlson-Crittenden device, further modification, 10240
 - determination of inflight biochemical responses utilizing parotid fluid collection technic, 4187
 - flow rate and periodontal status in human, 11965
 - flow rate effect of mental exercise, 11963
 - flow rate effect on calcium and protein levels, 7363
 - flow rate effect on calcium, magnesium, and protein concentrations, 10239
 - hyperhydration and parotid flow in man, 7349
 - measurement of trace levels of deuterium oxide using infrared spectrophotometry, 11964
 - parotid versus extra-parotid flow rate in human, 11961
 - periodontal status, 4178
 - rapid transfer of cortisol from blood-stream to parotid fluid, 11962
 - unstimulated, uric acid levels, effect of uricosuric drug administration, 11960
 - uric acid levels, effect of rate of gland function, 11959
- Sallas, Gustav A., labor law and practice in Brazil, 11309
- Salmon:
 - Abernathy diet, test of components, 16636
 - caloric and vitamin levels of diets, studies, 8042
 - DDT effects on ecology of salmon streams in southeast Alaska, 8040
 - fingerlings, effects of age, etc., on characteristics, 8042
 - fisheries, agreement with Japan, 15794
 - migrating adult salmonids, response to varied orifice conditions, 14066
- Salmonella:
 - control, sanitation guidelines for processors of poultry and animal byproducts, 11922
 - destruction, report of conference, 8
 - heat stability of egg white proteins under minimal conditions that kill salmonellae, 11918
 - reports, review of salmonellosis in cattle, 9
- Salmonidae:
 - bacterial kidney disease of salmonid fishes, 4802
 - MS-222 use as anesthetic, 8033
- Salt:
 - minerals yearbook chapter, 6690
 - titanium-oxygen alloy and titanium chlorides in molten sodium chloride, reaction rates, 14359
 - see also* Brines—Salts.
- Salt Creek area, N. Mex., geology and mineral resources, 17821
- Salt domes, Texas, Louisiana, Mississippi, Alabama, and offshore tidelands, survey, 2541
- Salt Lake City, Utah, area wage survey, metropolitan area, 8312
- Salt River and Valley:
 - basin survey, engineer report—
 - departmental edition, 1028
 - document edition, 526
 - water supply outlook and snow surveys, 4044

- Salt River Pima-Maricopa Reservation, long-term leases, law, 429
- Salt water, *see* Sea water—Water.
- Saltbush, fourwing, percentage of filled seeds, 11128
- Salteedar, *see* Tamarix.
- Salton Sea, evaporation, techniques used to measure, 9572
- Saltonstall, C. W., Jr.:
research and development of new polymer systems for reverse osmosis membranes, 8213
study of membranes for desalination by reverse osmosis, 6448
- Saltonstall, Leverett, tributes upon retirement, 2077
- Salts:
chemistry and technology research, USSR study, 15350
hydrated multivalent cations, new class of molten mixtures, 9794
inorganic—
effect on pyrolysis of wood, alpha-cellulose, and lignin determined by dynamic thermogravimetry, 8103
technical grade, military standard, 15193-104
- Salutes (military), *see* Military ceremonies, honors, and salutes.
- Salvage:
fire and water damaged records, SBA, Minneapolis, Minn., 14165
publications in salvage archeology, 5499, 10081, 15734
- Salzman, Jack A.:
frequency and viscous damping of liquids during weightlessness, 15571
liquid-propellant reorientation, 5261
- SAM, *see* School of Aerospace Medicine.
- San Houston, Fort, employees, relief, 279
- Samala, Ricardo V., relief, 16198
- Samanski, Rumiko, relief, 13744, 16196, 17508
- Sammel, E. A., water resources of Ipswich River basin, Mass., 6411
- Samoa, *see* American Samoa.
- Samonski, Frank H., Jr., technical history of environmental control system for Project Mercury, 18009
- Sample display service, new way to find agents and distributors overseas, 4923, 14207
- Sample surveys, *see* Social surveys.
- Samplers, mechanical, in use at Grand Junction, Colo., design and descriptions, 15963
- Samples:
aqueous ion exchange determines iodine-131 concentration, 12833
biological, taken during orbital flight, storage problems, 9820
- Sampling:
inspection, guide, quality and reliability assurance handbook, 10902
rates, multiplexing control device for handling wide variations, 12887
tool to extract cores from baled hay or straw for analysis, 13201
see also Assaying—also names of substances or objects sampled.
- Sampling (statistics):
self study course, 17703-704
- Samuels, Richard D.:
effects of configuration geometry on supersonic aerodynamic characteristics of simulated launch vehicle, 5239
static longitudinal aerodynamic characteristics of proposed decelerator test vehicle, 6897
turbulent boundary layer at Mach 6 with heat transfer at high Reynolds numbers, 8488
- Samuelson, Paul A., review essay of his economic works, 6616
- San Andreas fault, zoogeographic evidence for late Tertiary lateral slip, 17827
- San Antonio, Tex.:
area wage survey, 16818
HemisFair, 1968, U.S. participation, amend act—
law, 399
report, 621
- San Bernardino, Calif., area wage survey, 5067
- San Carlos Reservation, longer term leases, authorize reports, 12261
- Sanchez, Pedro A. J., relief, 9238
- Sanchez-Hernandez, Hector J., relief, 9202, 12146, 12214
- Sanchez Jerez, Ernesto, relief, 9243
- Sand:
budget of littoral sands in vicinity of Point Arguello, Calif., 7924
coarse, flume experiments on transport, 16695
embedment, facilitates heat-treatment of metal parts, 6779
minerals yearbook chapter, 5133
wave-powered device for moving sand, feasibility study, 13975
- Sand pine, *see* Pine.
- Sanders, Curren J., evaluation of smoke-wire technique for measuring velocities in air, 10293
- Sanderson, H. Reed, publications from San Joaquin Experimental Range, 4824
- Sandhills, *see* Dunes.
- San Diego, Calif.:
area wage survey, 6610
Point Loma demonstration plant, conceptual design study of desalination plant-replacement, 15330
Sunset Cliffs, beach erosion study, engineer report—
departmental edition, 1029
document edition, 521
- San Diego County, Calif.:
Sweetwater River, engineer report—
departmental edition, 15228
document edition, 14926
- Sandoval County, N. Mex., effects of land-treatment practices on runoff water supply, 6412
- Sands, A. G.:
microparticle and fiber reinforcement of epoxy resins, 5352
microvoids in glass-filament-wound structures, their measurement, minimization, and correlation with interlaminar shear strength, 11677
- Sandstone:
Clinton hematite deposits, Butt Mountain area, Va., 12819
epigenetic uranium deposits in sandstone in United States, geology, 8167
Mitchell and Berea sands, lower Newport field, Newport Township, Ohio, secondary recovery of oil by waterflooding, 14361
Venango second sand, Reno pool, Venango Co., Pa., under-ground combustion oil-recovery experiments, 11372
waterflood performance, theoretical and field, Kane oilfield, Pa., 9769, 12814
- Sandstone Creek, watershed, hydrologic effects of small reservoirs, 2376
- Sandwich construction:
buckling of sandwich and ring-stiffened 120° conical shells subjected to external pressure, effect of edge constraint, 11417
deformation of shallow spherical sandwich shells under local loading, 6895
Forest Products Laboratory, publications, list, 9530
honeycomb structures, detection of entrapped moisture, 11453
titanium and nickel-base, edgewise compressive properties at elevated temperatures, 8102

INDEX 1967

Sandwich construction—Continued
see also Cylinders—Panels and paneling—
 Shells (aircraft).
 Sandy Hook to Cape Henry, coast pilot, 4414,
 7557
 San Felipe division, *see* Central Valley
 project.
 Sanford, F. Bruce, commercial fisheries ab-
 stracts, 3109
 San Francisco, Calif.:
 aircraft accident, 17059
 area wage survey, 9744
 Sanger, Margaret, award in world leadership,
 accepted by W. Willard Wirtz, Secretary of
 Labor, on behalf of the President (re-
 marks), 1349
 San Geronimo Wilderness Area, family winter
 recreational use, hearings, 2050
 Sangully, Julio, Jr., relief, 577
 Sanitation:
 cheese and cheese products plants, sanitary
 standards, military standard, 9376
 effective, smoked-fish plants, 9514, 16619
 environmental aspects of hospitals sup-
 portive departments, 11736
 equipment, Federal item identification
 guides for supply cataloging, supple-
 ments, 3288
 FES aid, sanitation series, 14022
 field sanitation, team training, Medical
 Service, Army pamphlet, 10264
 guidelines for processors of poultry and
 animal byproducts for salmonella con-
 trol, 11922
 home laundering, 17317
 Indian programs, briefing, hearings, 10655
 milksheds, rating methods, 8639
 minimum standards for community infant
 formula services, 15698
 sanitary significance, fecal coliforms in
 environment, 6345
 standards, smoked-fish processing, fish-
 smoking establishments, recommendations,
 11759
see also Food sanitation inspectors.
 San Joaquin Experimental Range, publica-
 tions, 4824
 San Joaquin Valley:
 Madera area, data for wells, 12605
 spinning performances of cottons, com-
 parison with varying fiber properties,
 1964-65 season, 15860
 San Jose, Calif., area wage survey, 5063
 San Juan Basin, stratigraphy and regional
 tectonic implications of Upper Cretaceous
 and Tertiary rocks, 16693
 San Juan County, Utah, Indians, royalties
 from certain lands on Navajo Reservation,
 expenditure to benefit, report, 881
 San Juan Mountains:
 ash flows and related volcanic rocks asso-
 ciated with Creede caldera, 8166
 western, Mount Wilson quadrangle, geol-
 ogy, 15304
 San Juan National Historic Site, general in-
 formation, 15613
 Sanner, William S., preparation characteris-
 tics of Pennsylvania anthracite from Bot-
 tom Red Ash bed, northern field, 12830
 San Patricio County, Tex., civil rights status
 of Spanish-speaking Americans, 14848
 San Rafael Wilderness, Los Padres National
 Forest:
 designate—
 hearings, 10854, 15038
 message from the President, 5995
 reports, 10734, 14977
 Santa Ana, Calif., area wage survey, 12773
 Santa Ana National Wildlife Refuge, birds,
 list, 17779
 Santa Ana River and Valley:
 upper valley, ground water—
 patterns of subsurface flow, 1118
 studies proposed, progress report, 1125
 Santa Ana winds, *see* Winds.

Santa Barbara County, Calif., Santa Ynez
 River basin, Lompoc subarea, 1957-62
 hydrologic inventory, 1117
 Santa Clara County Welfare Department,
 intake and case recording, fact-finding
 report, 10973
 Santa Fe County, N. Mex.:
 land, transfer to AEC—
 law, 407
 report, 4503
 Santa Rita Experimental Range, center for
 research on improvement and management
 of semidesert rangelands, 2331
 Santa Rita quadrangle, N. Mex., general
 geology, 14171
 Santa Ynez River and Valley, basin, Lompoc
 subarea, 1957-62 hydrologic inventory,
 1117
 Santiago, Jorge S. Vidal, *see* Vidal Santiago,
 Jorge S.
 Santillano, Antonio B., relief, 284, 872
 Santoro, Gilbert J., Hall coefficient of tan-
 talum carbide as function of carbon con-
 tent and temperature, 18018
 Santos-Estevez, Mario O., relief, 301, 591,
 865
 San Xavier Reservation, long-term leases,
 law, 429
 Sapstreak, effect of staining caused by sap-
 streak disease on sugar maple log and
 lumber values, 2506
 Sapwood, differences between heartwood and
 sapwood, 2302
 Saraf, Zoltan W., effect of mechanical vibra-
 tions on performance of superconducting
 magnets, 11511
 Saratoga County, N.Y., population, special
 census, 10375
 Saratoga National Historical Park, general
 information, 14554
 Sarcoma, *see* Tumors.
 Sardines, larvae, distribution in California
 Current region off California and Baja,
 California, 1951-64, summary, 8036
 Sarin:
 conditional reflex activities of dogs
 poisoned with sarin and then treated
 with nemikol-5, Bulgarian study, 6563
 poisoning of white rats, prophylaxis,
 Bulgarian study, 6544
 Sarisella, *see* Crustaceans.
 Satellites:
 Alouette I, electron densities and scale
 heights—
 over American continents, 2617
 summary graphs, 16930
 recorded at Hawaii, 6736
 Ariel I, 1st international satellite, experi-
 mental results, 6732
 artificial earth—
 navigational use, by Doppler method,
 USSR study, 11280
 orbital prediction and differential cor-
 rection using Vinti's spheroidal
 theory, 8482
 systems tests effectiveness in attaining
 reliable performance, 2697
 atmosphere investigation, methods, 6911
 attitude control, semi-active gravity gra-
 dient system, evaluation—
 appendices, 2598
 technical summary, 2597
 attitude stability of spinning passive orbit-
 ing satellite, 6709
 communications—
 act of 1962, report on activities, etc.,
 message from the President, 9066
 bibliography, 11433
 FCC rules and regulations, 3277
 Government use, 1967—
 hearings, 13707
 report, 15000
 use for direct relay of Apollo spacecraft
 data, feasibility, 15559

Satellites—Continued

communications—continued
use for transmission of unidirectional (simplex) programs, USSR study, 15386
communications, navigation, geodesy, meteorology, etc., 6735
control, command processors, 14479
Cosmos satellites in near-earth orbits, USSR study, 5017
display system, use of NTDS, 14593
domestic satellite policy (remarks), 16564
electron densities and scale heights in top-side ionosphere, 2617, 6736
summary graphs, 16930
ESSA spacecraft launching system, 1033
ESSA 3, meteorological satellite data, television cloud photography, catalog, 16536
Explorer XII, etc., and Ariel 1, solar array regulators, 12927
Explorer XXIX (Geodetic Explorer), gravity gradient, stabilization system and performance, 17940
Ford Foundation proposal for broadcasters non-profit satellite service, hearings, 2111
geodetic, passive, ground-based photometric surveillance, 11413
geodetic reference system, three dimensional, worldwide concept updated, 6218
geodetic satellite observation station, agreement with—
Japan, 11867
Mexico, 11869
Goddard project summary data, 12846
gravity-oriented, orbit adjust and station keeping method, mathematical model and study, 2688
Japanese geodetic satellite observation station, agreement, 8732
Kosmos-122, investigation of cloud cover and out-going radiation, USSR study, 2443
low-thrust orbit raising in continuous sunlight while thrusting in plane perpendicular to earth-sun line, 15567
Luna-9, lunar panoramas obtained, stratified and multi-faceted forms, USSR study, 1280
Luna-10—
intensity and spectral composition of lunar gamma radiation, USSR study, 1281
investigation of cosmic radiation, USSR study, 1282
magnetic field measurements in neighborhood of moon, USSR study, 1285
soft corpuscular radiation, USSR study, 1283
lunar, indications of lunar intersection of tail of earth's magnetosphere according to charged particle traps, USSR study, 1284
lunar ionosphere detection made by 1st lunar artificial satellite, results of experiments, USSR study, 4950
manned orbiting laboratory, monitoring crew performance, predicting 4-hour psychomotor performance from half-hour, 17355
meteorological, use in cloud research, USSR study, 12744
moons of Jupiter, round-trip trajectories to, 18017
natural environment in synchronous circular orbit, 15883
navigation, future potentials, 11394
NRL, satellite position display, simplified prediction equations for, 5349
numerical theory, in Brendel's coordinates, 11545
observation of distant man-made space objects, USSR study, 16765

Satellites—Continued

orbiting solar observatory, NASA facts, 1437
passive communications, orbit position control, handbook, 11398
passive geodetic—
canister assemblies, 5184
inflation rate study, 8426
Pegasus—
meteoroid satellite project, 1st summary report, 2684
thermal design, 1477
evaluation, 2687
PFM encoding systems, evolution, 5241
plastic space erectable prototype, development, 16913
position display, computer program (SPAD), 8595
power systems configurations for maximum utilization of power, study and analysis, 16918
Project EOLE, balloon meteorological research, agreement with France, 2906
publications, price list, 5419
random-scan display of predicted positions, 9994
remote sensing, potential from space platforms, agricultural application, 15843
resonant librating orbits, use in satellite geodesy, 14476
satellite meteorology, Soviet scientists, papers, 4986
scanning small celestial area, minimum energy reaction wheel control, 9899
SPAD formatter, buffer interface between satellite prediction computer and display, 8593
STARS II, fully automatic data processor, description, etc., 11527
synchronous orbits, radiation environment, 8437
Syncom engineering report, 11556
telemetry data simulation program, generalized, 1508
telemetry/telecommand station near Fairbanks, Alaska, agreement with European Space Research Organization, 11836
Telstar I, background information, 2615
Telstar II, background information, 2615
thermal bending plus twist of thin-walled cylinder of open section with application to gravity gradient booms, 15561
TIROS—
meteorological data, television cloud photography, catalogue, 6227, 13990
radiation data, synoptic world weather analysis, 12922
TIROS IX, illustrated folder, 9933
tracking equipment, USSR description, 9611
use for geodesy, USSR study, 1212
Vinti's accurate reference satellite orbit with inclusion 3d zonal harmonic, differential corrections, 15564
Voyager program, voyage to planets (remarks), 8514
weather—
data for automatic compilation of cloud maps on Setun' electronic computer, USSR study, 12660
upper troposphere motions as revealed by satellite-observed cirrus formations, 9430
see also Launching facilities.
Sato, Matsue, relief, 580
Saturn (planet):
use of Jupiter gravity turns for tailoring trajectories to Saturn with consideration of launch opportunities, 2692
Saturn (rocket), see Rockets.
Saucier, Kenneth L.:
design, construction, and postshot evaluation of concrete stem for access hole, 17395

INDEX 1967

Saucier, Kenneth L.—Continued
vibrating slope method for measuring
concrete workability, 4742

Saudi Arabia:
aircraft and equipment, transfer, agree-
ment, 2926
area handbook, Army pamphlet, 5733
background notes, 15761
capsule facts for Armed Forces, 11977
farm products, supply and demand projec-
tions to 1975, with implications for
U.S. exports, 7886
mineral industry, minerals yearbook
chapter, Kuwait-Saudi Arabia Neutral
Zone, 5112
sedimentary geology, 1124
Sauerkraut, bulk, U.S. standards for grades,
13890
Saugus Iron Works National Historic Site,
establish, report, 14985
Sault Ste. Marie, Mich., commerce passing
through canals, salt water ship movements,
statistics, 9423
Sault Ste. Marie, Ontario, commerce pass-
ing through canals, salt water ship move-
ments, statistics, 9423
Savannah, Ga., area wage survey, 15439
Savannah (nuclear ship):
layup, hearings, 12307
liability during private operation, agree-
ment with—
China, Republic, 15799
Greece, 11856
operation, continue, hearing, 13853
visit to Hong Kong, agreement, 15795
Savannah River and Valley, geology and
ground water for atomic energy plant,
16705
Save them young, New York State's prekin-
dergarten program, 13962
Saveson, Irwin L., deep-tillage investigations
on alluvial soil in sugarcane area of
Louisiana, 1672
Saville, Thorndike, jr., rock movement in
large-scale tests of riprap stability under
wave action, 16520
Saving and thrift, size and composition of
consumer saving, 6304
Savings accounts, *see* Banks and banking.
Savings and home financing source book,
14023
Savings and loan associations:
current issues and future opportunities
(address), 7961
financial institutions supervisory act—
law, 409
reports, 666, 674, 691
gifts to minors in D.C., permitting de-
posits, report, 13639
holding company act amendments of
1967—
hearings, 13849, 16316
report, 13796
participation loan transactions, insured
associations, 3675
prohibit from participating in gambling
activities, hearing, 16397
savings and home financing, source book,
1966 data, 14023
savings and mortgage lending activity, se-
lected balance sheet items, FSLIC in-
sured associations, 3365
South American progress made (address),
7960
trends, 16574
see also Federal savings and loan associa-
tions.

Savings banks, *see* Banks and banking.
Savings bonds:
bond tips from U.S. savings bond reporter,
3061
freedom shares (remarks), 8775
importance in current economic picture
(remarks), 18242
issued and redeemed, 4007

Savings bonds—Continued
now, build your own retirement program,
5481
program, Federal employee participation
(remarks), 7106
program inauguration for Federal em-
ployees (remarks), 8675
retirement and savings bonds, issuance—
law, 504
law, summary, 4566
legislative history, 2064
Senate amendments, summary, 4568
series A-E, tables of redemption values,
8619, 11708
series E,—
department circular, amendments, 5569,
8770
department circular, supplement, 17266
general information, price, etc., 11779
issuing agencies, regulations, 13167
series H, current income, 8674
series J and K payment or redemption,
department circular, 2947
series J, tables of redemption values, 5410,
11709
servicemen-savings bond commemorative
postage stamp, 1st day ceremony
(address), 1556
Savings notes, issuing agencies, regulations,
13167
Savino, Joseph M., transient solidification
of warm liquid flowing over chilled flat
plate, 12935
Sawdust, sacking, economic potentials, in
western resource conservation and develop-
ment project areas, 10920
Sawlogs, *see* Logs.
Sawmills:
coarse feed sawing of red oak, limited
study, 11111
hardwood, chip manufacture, cost analysis,
14139
knee position recorder for carriage head-
blocks, 2297
operation, Army technical manual, 106
Sawochka, S. G., thermal and hydraulic per-
formance of potassium during condensa-
tion inside single tubes, 15506
Saws:
hole saw drill attachment has zero force
reaction, 6767
radial, how to inspect chart, 9685
table saw, how to inspect chart, 9687
Sawtimber, *see* Timber.
Sawtooth National Recreation Area, estab-
lish, hearing, 16417
Sawyer, D. E., heterodyne operation of av-
alanche photodiodes, 18023
Sawyer, James W., effects of configuration
modifications on aerodynamic character-
istics of tension shells, 14475
Sawyer, Richard H., pitch maneuver speed
margins for supersonic transport config-
uration with variable-sweep wing, 17000
Saylor, James H., modification of nearshore
currents by coastal structures, 8326
SB series, list, 1933
SBA, *see* Small Business Administration.
Scabies, sheep, eradication, methods, etc.,
5666
Scaffolding:
prefabricated, Federal item identification
guides for supply cataloging, suppl-
ements, 3288
Scaffolds:
shipyard maritime safety data, 17888
how to inspect chart—
scaffold construction, light duty, 9690
tubular steel frame scaffold, 9694
tubular steel tube & clamp scaffolding,
9695
Scale factors for parachute opening, 16984
Scale insects, hemlock pest, *Florida externa*,
description, control, etc., 17796

Scales
height
obs
673
Scales
weight
tio
Scallion
gles
11 re
Scallops
land,
Scamp
see M
Scandio
Scandi
secti
Scanol
Scanne
elect
ido
co
IR
15
ther
Scanni
elect
mea
opti
re
phot
11
sate
m
9
twi
fr
Scarra
Scatte
s
ang
m
deto
e
th
elas
t
1
elec
c
inel
1
inel
ligh
ligh
1
mo
1
sou
Schar
sen
Schar
fin
lut
Schar
ed
hes
Schar
chu
eff
rev
Scha
lut
Scha
us
so
Scha
st
17

- Scales (measures):
heights in topside ionosphere, Alouette 1 observations, summary graphs, 2617, 6736, 16930
- Scales (weighing instruments):
weighing and measuring devices, specifications, etc., replacement pages, 6914
- Scallion, William I., body motions and angles of attack during Project Fire flight II reentry, 18020
- Scallops, Cenozoic pectinids of Alaska, Iceland, and other northern regions, 11180
- Scamp (single-channel monopulse processor), see Monopulse radar.
- Scandinavia, billion dollar U.S. market, 9603
- Scandium isotopes, Sc 45, differential cross sections for (d, α) reaction, 16989
- Scanlon, Thomas M., relief, 13569
- Scanners:
electrical continuity scanner facilitates identification of wires for soldering to connectors, 6768
IR vidicon, monitors many test points, 15545
thermionic, pinpoints work function of emitter surfaces, 1449
- Scanning:
electron probe microanalysis, 5288
means for Cassagrainian antenna, 12900
optical systems, information limits, theoretical investigation, 5173
photo-scan tube, improved, design concept, 12891
satellite scanning small celestial area, minimum energy reaction wheel control, 9599
twin helix system produces fast scan in infrared detector, 6800
- Scarabaeids, see Beetles.
- Scattering:
angular distribution of thick-target bremsstrahlung which includes multiple electron scatterings, 14466
determining scattering and absorption coefficients of paper by diffuse illumination, 11114
elastic and inelastic, of 42-MeV alpha particles from even tellurium isotopes, 11536
electron scattering and bremsstrahlung cross-section measurements, 9811
inelastic electron, by nuclei, calculation, 12019
inelastic, generalized potentials, 11543
light, gas density measurements, 11490
light, in highly reflecting pigmented coatings, summary of investigations, 14392
monostatic acoustic, from ocean volume, 13034
sound in ocean, USSR articles, 9627
- Schaaff, Harry A., second breakdown in semiconductor devices, bibliography, 18082
- Schaeffer, Harry G., computer program for finite-difference solutions of shells of revolution under asymmetric loads, 11497
- Schaeffer, K. E., gluing ammonium-salt-treated southern pine with resorcinol-resin adhesives, 8063
- Schaffer, E. L.:
charring rate of selected woods, transverse to grain, 11132
effect of panel thickness and noncombustible inserts on surface flammability of plywood, 8064
review of information related to charring rate of wood, 8059
- Schaffer, Robert, organic chemistry, air pollution studies, etc., 18081
- Schale, K. Warner, study of achievement test used in health examination surveys of persons aged 6-17 years, 13098
- Schallan, Con H., analysis of 2 logging road standards for BIM's Tillamook project, 11118
- Scharpf, Robert F.:
biology and pathology of dwarfmistletoe parasitizing true firs in California, 5685
spread of dwarfmistletoe into Jeffrey pine plantation, trees infected after 22 years, 16658
- Scheiber, Harry N., condition of American federalism, historian's view, 4638
- Scheldegger, A. E., probability concepts in geomorphology, 2366
- Scheiman, James, comparison of flight-measured helicopter rotor-blade chordwise pressure distributions with static 2-dimensional airfoil characteristics, 11502
- Schell Creek range, Connors Pass quadrangle, geology, 16694
- Schenectady, N.Y., area wage survey, 12772
- Schermerhorn, Edward J., soil survey of Madison County, Ind., 8700
- Schilling, B. L., obtaining surface temperatures of materials in presence of extraneous radiation, 16975
- Schimke, Harry E., disposal of logging slash, thinnings, and brush by burying, 4839
- Schindler, A. I., residual resistance, ratio of pure iron, 5348
- Schineller, E. Ronald, development of optical waveguides and components, 15508
- Schistosomiasis, prevalence in Puerto Rico, skin test survey, 8654
- Schlesinger, Lawrence E., tips, guide to placement of NYC enrollees with epilepsy, 2488
- Schloss, Samuel, nursery-kindergarten enrollment of children under 6, 16937
- Schmid, Hellmut, concept for up-dated 3-dimensional worldwide geodetic reference system, 6218
- Schmid, P. E., feasibility of direct relay of Apollo spacecraft data via communication satellite, 15559
- Schmidt, Harold W., handling and use of fluorine and fluorine-oxygen mixtures in rocket systems, 11425
- Schmidt, James E., performance of X 258 3d-stage motor on Delta 36 (OT-3), 14460
- Schmidt, Jerome P., influence of intermittent 98 percent oxygen and 380 mm. Hg total pressure on susceptibility to tularemia, 5715
- Schmidt, Wyman C., growth opportunities for young western larch, 4829
- Schneider, Edward, county veteran population, 17283
- Schneidman, Edwin S., bulleting of suicidology, 14617
- Schnellbacher, E. E.:
addresses—
Jan. 24, 1967, 4920
Mar. 27, 1967, 8224
- Schnittker, John A.:
addresses, etc.—
Sept. 8, 1966, 27
Oct. 15, 1966, 1695
Nov. 4, 1966, 4141
Nov. 29, 1966, 4101
Jan. 12, 1967, 4090
Feb. 17, 1967, 7269
Mar. 14, 1967, 7259
June 5, 1967, 13253
June 30, 1967, 13244
- Scholars:
presidential, 4717
what shapes their talent?, 12468
- Scholarships:
dependents of Army personnel, 17383
educational, loans, and financial aids, 1
health professions, program, 13082
joint commission for review of operation of certain scholarship funds, agreement with Mexico, 7175
School attendance, one million dropouts, Sputnik of 1967, 17721
School books, see Textbooks.

INDEX 1967

School buildings:

- federally affected areas, construction assistance, 1966 annual report, 6175
- one-room schoolhouse and how it grew, 10938
- schoolhouse in the city, 13963
- schoolhouses for big cities, 15217
- School buses, busing kids to suburbs, 10928
- School children, *see* Children.
- School finance, *see* Education.
- School libraries, *see* Libraries.
- School lunches:
 - District of Columbia needy children, provide, appropriation, reports, 2087, 16381
 - fish & shellfish type A quantity recipes, 15257
 - layout, equipment, and work methods for kitchens and serving lines, 4121
 - private school lunch management manual, 16442
 - statutes, compilation, 7262
 - type A—
 - quantity recipes, 46
 - topics, better management, etc., 965
- School of Aerospace Medicine:
 - aeromedical reviews, 4174, 7340, 11953, 14769
 - technical reports, 65-92, 1730-44, 4175-87, 5706-15, 7341-70, 8868-69, 10231-244, 11954-967, 13269-272, 14770-782, 15894-901, 17346-363
- School Safety Patrol Week, *see* National School Safety Patrol Week.
- School superintendents, etc.:
 - District of Columbia school officers, etc., increase salaries, law, 514
 - superintendents, large public school systems with enrollments of 10,000 or more, directory, 6197
- Schoolbooks, *see* Textbooks.
- Schooler, Allan L., relief, 16175
- Schoolhouses, *see* School buildings.
- Schools:
 - built abroad by America pupils, thousand partnerships, 4722
 - certificated pilot flight and ground schools, list, 11092
 - change and American schools (address), 6177
 - demonstration center, physical fitness, project, 18145
 - desegregation—
 - guidelines, hearings, 4548
 - nobody wanted school desegregation, 15213
 - plans, revised statement of policies, 2190
 - policies and guidelines—
 - investigation, hearing, 752
 - select committee to study report referring investigation to Judiciary Committee, 4559
 - progress and problems (address), 4718
 - schools can be desegregated, 14849
 - southern, 1966-67, study, 13436
 - District of Columbia—
 - amend act to provide for compulsory attendance and taking census, report, 16378
 - custodial and engineering staffing, guidelines needed, GAO report, 12587
 - employees under fair labor standards act, as amended, 10131
 - enrollment—
 - fall, approximately 55 million, Oct. 1966 survey, 5678
 - population characteristics, census, 7483, 16009
 - projections to 1985, United States, 10363
 - extended use of school facilities, 16499
 - fallout protected, pictorial review, 5917, 16058
 - fallout shelters, civil defense program materials, 16052

Schools—Continued

- federally affected areas, operation assistance 1966 annual report, 6175
- federally impacted areas, improve assistance—
 - hearings, 7742, 9153, 12419, 17664
 - reports, 9118, 10557
- first-rate cities, first-rate schools (address), 12464
- graduate, improvements sought, USSR, 15407
- grants for construction of training facilities, etc., for health professions personnel, law, 463
- how good are our schools? Armed Forces qualification test provides clue, 1005
- independent, need for entangling alliances (address), 6190
- instruction in State and local systems, standard terminology, 10942
- instructional programmer, prediction of success in, 17345
- library resources, textbooks, and instructional materials, acquisition under ESRA, guidelines, 16513
- lunchrooms, work injuries and accident causes, 14282
- mechanic, Federal aviation regulations, 11002
- must take initiative, one million dropouts, Sputnik of 1967, 17721
- nation's schools, report on cooperative research to improve, 16510
- Negro enrollment in Southern and border States, 4711
- nonprofit private elementary and secondary, loans for equipment and materials, national defense education act, 1007
- NTC, specially trained teachers for education of poor, 6188
- our short-changed city schools (address), 16505
- pilot, Federal aviation regulations, 6241, 11000
- preventive dentistry program, feasibility study of use of stannous fluoride mouthwash, 17352
- private, lunch management manual, 16442
- public—
 - accounting principles, 16509
 - bond sales, 6176
 - districts, 17 southern and border States, equal educational opportunities programs, status of compliance, 10943, 17725
 - finance programs, 1966-67, State compilations, 17724
 - instruction in science, etc., Federal financial assistance, guidelines, 13956
 - land exchanges with Forest Service, facilitate—
 - hearings, 16303
 - report, 16275
 - racial isolation, Civil Rights Commission report, 5918
 - summary, 8982
 - urban teachers' compensation, long-term trends, 5980
- public systems, education directory, 10930
- public training schools serving delinquent children, directory, 4364
- pupil personnel workers, certification requirements, 9396
- racial injustice, heat in our kitchens (address), 1004
- Russian, 10-year program, final examinations, 1002
- school certification of full-time attendance for social security purposes, 15743
- school plant management series, 16499
- staffing for better schools, 16511
- State systems, statistics, 7914
- summer projects of Education Office, 9410
- tax funds in cities and suburban areas, comparison (address), 16512

Schools—Continued

- Washington State, etc., income from public lands, use for construction of facilities, etc.—
 hearing, 9323
 law, 12177
 reports, 10733, 12262
 what OE's decentralization means, decisions from the field, 16497
 youth physical fitness program, suggestions, 8617
 see also Education parks—Elementary education—Faculty (schools)—High schools.
- Schools of forestry, see Forests and forestry.
- Schepert, David W., remarks, Dec. 19, 1966, 4453
- Schrantz, Paul R., temperature control of orbital otolith experiment, 12868
- Schreinemakers, F.A.H., method for construction of pressure-temperature diagrams for multicomponent systems, geometric approach, 2359
- Schrider, Leo A., waterflood performance, Kane sand, Kane oilfield, Elk County, Pa., 9769
- Schroek, Joann L., minority groups in Vietnam, 5735
- Schrödinger's equation, see Equations.
- Schroeder, Harold J., zinc, 2592
- Schroeter, Richard B., U.S. imports of horticultural products, 16641
- Schuerch, H., manned extravehicular activities in assembly and operation of large space structures, 16901
- Schuffe, J. A., behavior of water in various states, 15533
- Schuldiner, S., potentiostatic current-potential measurements on platinum electrode in high-purity closed system, 10011
- Schuller, Frederick T., operation of hydrodynamic journal bearings in sodium etc., 9901
- Schultz, J.:
 brackish well water reverse osmosis tests at Midland, Fort Stockton, and Kermit, Tex., 11217
 Potomac River reverse osmosis test, 6441
- Schultz, Leonard P.:
 new genus and new species of zoarcid fish from north Pacific Ocean, 11606
 South American freshwater angelfishes, 8539
- Schultz, Robert P., operational summer planting of slash pine, 15285
- Schultz, Theodore W., investment in poor people, 5044
- Schultze, Charles L., testimony, hearings, 15158
- Schurz, Carl, papers in Library of Congress, register, 8230
- Schuster, Ruble C., UNESCO special fund projects, 14690
- Schutamann, R. L., cleanup and confirmation of pesticide residues, etc., 13200
- Schwartz, Ralph L., soil survey of Fisher County, Tex., 2877
- Schweltzer, Dennis L., computer program for evaluating long-term forestry investments, 14131
- Schwirian, Richard E., single-phase induction electromagnet pump, 9909
- Schibe, Herbert W., rolling-element fatigue life of SAE 52100 steel hollow balls, 6579
- Science:
 academic, Federal support in universities and colleges, 13011, 17057
 academic science, degree profile and Federal contributions to universities, etc., 14560
 Academy of Medical Sciences, USSR, nominations, 5022
 Academy of Sciences, Armenian SSR, annual meeting evaluates recent work, 9636

Science—Continued

- Academy of Sciences, Azerbaydzhan, annual meeting, 1966 activities discussed, 9668
- Academy of Sciences, Bulgaria—
 history and achievements, 6557
 interview with Deputy Chairman, 6480
 Vice President Vladimir Georgiyev interview, 4991, 6480
- Academy of Sciences, Kazakh SSR—
 activities, 12677
 dissertations defended by scientific co-workers, list, 11246
 projects planned, 12753
 scientific research, resolution, 4965
- Academy of Sciences, Latvia, biographies of members, 1163
- Academy of Sciences, Moldavian SSR, work reviewed, 8272
- Academy of Sciences, Rumania, astronomical observatory, activities, 1290
- Academy of Sciences, Tadzhik SSR—
 Department of Biological Sciences, newly elected members, 16785
 young scientists conference, 14254
- Academy of Sciences, Ukrainian SSR, organization of comprehensive research, 5399
- Academy of Sciences, USSR—
 All Union Entomological Society, activities, report, 2471
 Departments of Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds, annual convention, 12745
 elections of biomedical scientists, 1331
 new members, 2440
 reports, 6579
 seminars discuss latest concepts in philosophy and science, 1291
 vestnik (periodical), 4037
- Academy of Sciences, Uzbek SSR, work reviewed, 8272
- agricultural science in science community (address), 10160
- agricultural science review, 3001
- American manpower, 1964, report of National Register of Scientific and Technical Personnel, 5323
- analysis of scientific thought, USSR study, 1298
- applied, and technological progress, panel report—
 committee print, 16342
 hearing, 15049
 print additional copies, report, 16263
- aquatic, graduate educational grants, 1967-68 academic year, 1077
- aquatic sciences in Great Lakes area, 2241
- assistant, examination announcement, 7545
- astronautics and aeronautics, 1965 chronology, 1441
- Bulgaria—
 new pay scales for scientific workers, 1303
 progress, 1967 program, 6494
 scientific organizations operating under their own accounting systems, 6586
 classification, Library of Congress, 9749
 college regions science and engineering, environment, 1736, 14793-794
 colleges and universities, resources, 1964, expenditures and Jan. 1965 employment, preliminary report of survey, 2762
 Communist China translations, 3952
 Communist Chinese abstracts, 3114-23
 contemporary philosophical and applied problems, USSR studies, 2445
 contributions to Federal crime insurance, 16437
 control sciences—
 cybernetics in system, USSR study, 9660

INDEX 1967

Science—Continued

- control sciences—continued
- principles applied to biology and medicine, USSR studies, 1322
- coordination for needed production, USSR study, 1262
- course and curriculum improvement projects, 5324
- creative quest, USSR editorial, 16763
- development, integrated study, USSR, 9674
- development, Soviet-Polish symposium, 15411
- earth sciences—
 - Communist Chinese abstracts, 3118
 - East European abstracts, 3220
 - East European abstracts, 3217-24
 - education and government surplus material, 14186
 - education, and junior college, report, 16343
 - education program, Naval Research Laboratory, 17097
 - environmental sciences, program decisions (address), 7937
 - exchanges, agreement with Union of Soviet Socialist Republics, 7182
 - facilities, planning, design, and construction, literature, list, 14561
 - Federal careers, examination announcement, discontinuance notice, 17459
 - Federal careers in physical sciences, examination announcement, 1924
 - supplement, 5933
 - future international meetings, world list, 4073
 - Government scientific reports, standard for descriptive cataloging, 6245
 - information systems, nonconventional, in current use, descriptions, 11623
 - instruction, financial assistance guidelines under NDEA, 13956
 - international notes (periodical), 3439
 - international scientific programs, participation of Federal agencies, report, 6044
 - introductory, USAFI exercise book, 7845
 - Latvia, State prize candidates in science—USSR announcement, 12683
 - materials, importation agreement—
 - implement—
 - hearing, 951
 - law, 371
 - reports, 653, 655, 903
 - text, 5549
 - NASA, scientific reports for 1966, selected listing, 12854
 - national defense education act, loans to private nonprofit elementary and secondary schools for equipment and materials, 1007
 - natural, development in Bulgaria, role of Communist Party, 9th congress, 2465
 - natural science, philosophical problems, subjects for research, USSR list, 16779
 - new Hungarian candidates appointed, 9632
 - Panel on Science and Technology, 8th meeting—
 - papers, 12315
 - proceedings, 9170
 - papers, contributions from History and Technology Museum, title page, contents, and index, 14529
 - partnership between Federal Government and American universities in financing scientific enquiry (remarks), 7211
 - philosophical development of theories, USSR study, 5024
 - physical sciences—
 - national standard reference data system, extend service—
 - hearing, 12405
 - reports, 10601, 14956
 - research objectives, 1967, OAR, 7336
 - technician, examination announcement, 1910

Science—Continued

- physical sciences—continued
- trainees for vacation work-study programs, examination announcement, 17460
- policy studies, review and forecast, 2059
- radio science (periodical), 3803
- radio science, Journal of research, National Bureau of Standards, 2736
- reviews of data on resources, 2762, 5325-26
- role, increasing in our era, USSR study, 15419
- science and Air Force, history of AFOSR, 7335
- science and America's beauty, 15841
- science, and city, 6432
- science and consumers, 15840
- science and criminal justice—
 - symposium, 11699
 - task force report, 11704
- science and engineering, fact and fiction (address), 243
- science and engineering staff in universities and colleges, 1965-75, prospective manpower situation, 14563
- science and food for freedom, 13217
- science and improving our environment, 14738
- science and saving water and soil, 15842
- science and sea, 11649
- science and technology for mankind's progress, 13454
- science, foreign affairs, and State Department (address), 14671
- science, government, and public policy, Government-science relationships during 89th Congress, 13716
- scientific age, education and change (remarks), 17401
- scientific and technical information (USSR periodical), 1324, 3852
- scientific application of cybernetics in military science, USSR study, 1197
- scientific cooperation with Italy, agreement, 17231
- scientific information and documentation, dissemination in Rumania described, 14222
- scientific information need in medicine, USSR study, 15413
- scientific information notes, national and international developments, 3853
- scientific labor organization proves effective at Siberian mining institute, 14263
- scientific organization of work and training of industrial workers, USSR studies, 16752
- scientific organizations operating under their own accounting systems, Bulgarian decree, 5030
- scientific tests, publications, price list, 2804
- sociological problems of development, USSR review of new literature, 16787
- Soviet-Polish joint meeting, USSR study, 9658
- special foreign currency information program, 1967 list of translations in process, 7551, 17464
- student or classroom science project series, 4135-37
- surveys of science resources series, 2761, 9966
- teachers in Peace Corps, 5380
- teaching aid, portfolio of photographs, 17158
- teaching in public junior high school, 7909
- theoretical papers in hydrologic and geomorphic sciences (series), 2366
- today's science, tomorrow? (remarks), 135
- transnational business of science and technology (remarks), 9025
- underwater ships of science, USSR study, 8267

Science—Continued

USSR—
 abstracts, 4025-31
 achievements, 14248
 activities of academies reviewed, 8250
 basic contemporary trends discussed by
 Academician Ya. V. Peyve, 8253
 expansion in Soviet Republics, 12751
 Lenin prizes, recipients, 9657
 promoting development, 15374
 recent progress, 1267
 scientific and technical information service,
 organization, 2430
 scientific education, measures outlined
 for improving, 14245
 scientific establishments, activities, 2479
 scientific information, development, 9613
 scientific organizations—
 activities, 15379
 development, 1227
 news, 1226, 6519, 9638
 space program, 1962-65, goals and purposes,
 achievements, plans, and international implications, 4628
 technical cybernetics, problems of control
 and information problems, 2427
 visual and auditory materials of scientific
 character, circulation, agreement and
 protocol, 5546
 Yugoslavia, economic reform, 6515
see also names of sciences—*also* headings
 beginning Scientific.
 Science Advisory Committee, President's, *see*
 President's Science Advisory Committee.
 Science and Astronautics Committee, House:
 activities, 89th Congress, 4560
 calendar, 3484
 committee prints, 2057-59, 4560, 6043-44,
 7755-56, 9169, 9171, 10676, 12315,
 13716-17, 16342-343
 hearings, 753-754, 10677, 12316, 13714-
 715, 15049, 17612
 investigations and studies, aeronautics,
 outer space, other scientific research—
 authorization, report, 7671
 expenses, report, 10554
 Panel on Science and Technology, 8th
 meeting—
 papers, 12315
 proceedings, 9170
 reports, 7668-69, 10601, 10622, 14934
 Science and Technology, Federal Council for,
see Federal Council for Science and Technology.
 Science and Technology Office:
 appropriations, 1968—
 hearings, 9145, 15147
 reports, 10600, 15131
 Science Research and Development Subcommittee,
 report, 2059
 Scientific Advisory Board, USAF, first 20
 years, 11969
 Scientific and technical aerospace reports,
 3850
 Government-wide index, 3381
 indexes, 3851
 Scientific and Technical Information Committee,
 standard for descriptive cataloging
 of Government reports, 6245
 Scientific and Technical Personnel, National
 Register, *see* National Register of Scientific
 and Technical Personnel.
 Scientific apparatus and instruments, experiments,
 1958-66, analysis, 15983
 Scientific photography, *see* Photography.
 Scientific research:
 Academy of Sciences, Kazakh SSR, resolution,
 4965
 Air Force research—
 articles, 15878
 bibliography, 7304
 and development base in Slovakia, 17876
 animals in atomic research, uses, etc.,
 15977

Scientific research—Continued

armed services support, investigation—
 authorization, report, 6009
 expenses, reports, 7677, 14979
 basic research, applied research and development
 in industry—
 preliminary report, 5325
 survey, final report, 2761
 Belorussian Scientific Research Institute of
 Animal Husbandry, achievements in
 50 years of Soviet power, 15421
 careers, Agricultural Research Service,
 17323
 coordinating problems, Bulgaria, 2435
 cost accounting in—
 organizations, USSR study, 1343
 scientific research institute, USSR,
 16786
 economic and social effectiveness, factors
 contributing to increase, USSR study,
 1206
 economic efficiency of, Rumania, 15381
 economics, discussion, USSR, 11274
 effectiveness and financing, USSR study,
 1237
 Federal funds for research and development,
 geographic distribution, 13012
 federally generated technology, transfer,
 policy planning report, 10693
 funds for research and development,
 equitable distribution among States by
 Government agencies, hearings, 10839
 information retrieval system for research
 grants, Radiological Health Division,
 7064
 information, single and united system
 construction, USSR study, 9646, 9675
 Interior Department programs, hearing,
 17657
 manpower, impact of Federal policies, report
 and recommendations, 4650
 manpower, mobilization and utilization,
 hearings, 4652, 10869
 medical benefits from space research,
 17948
 OAR index of research results, 17342
 packaged Government research and development
 information for industry, list,
 10438
 Polar Scientific Research Institute of Sea
 Fisheries and Oceanography, USSR,
 activities, 6551
 research grant programs in NIH, administration,
 report, 17575
 research grants of PHS, 1966, index, 8647
 Rumania, role of higher education, 14223
 scientific documentation sponsored by NSF,
 price list, 6916
 space research and development, by-products
 (address), 5280
 Ukrainian scientific laboratories, institutes,
 and botanical garden, gains
 noted, 14235
 United States-Japan Committee on Scientific
 Cooperation, 1st 5 years, 1961-66,
 major activities, etc., 13138
 use of computers in scientific experiments,
 USSR study, 11245
 use of isotopes and ionized radiation, 4940
 USSR—
 industry and education cooperate, 8251
 problems in financing, 16745
 Soviet engineers reply to questions on
 role of their specialties, 6561
 VUZ students urged to use economic
 approach, 16746
 Yugoslavia, economic reform, 6515
see also subjects.
 Scientific Research Institute of Epidemiology
 and Microbiology, Moscow, *see* Moscow
 Scientific Research Institute of Epidemiology
 and Microbiology.
 Scientific societies:
 cadres, selection, distribution and structure
 outlined, USSR book excerpts, 15393

INDEX 1967

Scientific societies—Continued

Hungarian organizations, news, 2455
 Moscow Naturalist Society, Biophysics
 Section, activity, 4971
 Soviet organizations, news, 2436

Scientists:

Belorussian, more needed to train specialists in microelectronics and bionics, 1271
 biomedical, elections to Academy of Sciences, USSR, 1331
 brain drain into United States, staff study, 15029
 Bulgarian, role in radiation biochemistry, crystal chemistry and cybernetics, 1159
 contributions in hygiene, physiology, and scientific organization of labor, USSR study, 16767
 current employment market, 4727
 employment in industrial research, etc., 1965, preliminary report, 5325
 employment in State governments, 15450
 evaluation criteria, quality and quantity of publications, 1709
 how to become scientist (remarks), 10307
 Hungarian, news, 2455
 impact of Federal research and development policies upon scientific and technical manpower, report and recommendations, 4650
 Public Health Service, career opportunities, 8652
 Pugwash conference, 16th report, 1234
 recruitment of potential scientists, USSR study, 16764
 salaries and selected characteristics, 5326
 scientific manpower utilization, hearings, 4652, 10869
 scientific-pedagogical personnel, increasing reserves, USSR study, 11276
 scientists from abroad, 1962-64, as immigrants, educational exchange students, etc., 9966
 Tadzhik SSR Academy of Sciences, conference, 14254
 USSR—

benefits and improvements, 4982
 biographic sketches, 1330
 brain composition and function studied by Soviet scientists, 8271, 9610
 news, 9638
 obituaries of 8 Soviet scientists, 1204
 outstanding scientists honored, 1190
 research and activities reviewed, 14264
 satellite meteorology papers, 4986
 Uzbek, contributions to Republic's development outlined, 12671
 young scientists look at food, nutrients, etc., 12561
see also Agricultural research scientists.

Scintillation survey meters, *see* Radiation detection instruments.

Scipio, L. Albert, structural design concepts, some NASA contributions, 16932

Sclerometers, pendulum sclerometer for surface hardness studies, 11381

Sclerosis, *see* Multiple sclerosis.

Scoggins, James R., sphere behavior and measurement of wind profiles, 11537

Scola, Francis P., clinical evaluation of stannous fluoride, etc., 14319

SCORE, *see* Service Corps of Retired Executives.

Scotland, infant and perinatal mortality, 5466

Scott, Charles E., jr. Industry wage survey, fertilizer manufacturing, 12774

Scott, David W., art of Stanton Macdonald-Wright, introduction, 11595

Scott, Herbert E., M-1 engine subscale injector tests, 12950

Scott, W. Wayne, angular distribution of thick-target bremsstrahlung which includes multiple electron scatterings, 14466

Scott, Walter N., toxicity of monomethylhydrazine on frog cornea, 10242

Scott, Winston W., jr.:

design and operation of high voltage calibration facility, 5292
 standard for accurate phase-angle measurements at audio frequencies, 6924

Scotton, Donald W., operating costs and ratios, retail, 5493

Scouring and combing plants, *see* Wool.

Scrap:

automobile disposal, national problem, case studies, 8336

consumption and stocks at brass and wire mills, mineral industry survey, monthly, 3062

iron and steel, Southeast, sources, consumption, etc., 12797

metals, temporary suspension of duties, continue—
 law, 12180
 reports, 7730-13801

vanadium, molten-salt electrorefining, 17916

Screens (projection):

physical and optical properties, 7024

rafter screens, optical instruments, USSR, 6505

Screw-seal performance in vacuum environment, 6885

Screw threads, holding fixture facilitates pipe thread gage measurements, 8474

Screwworms:

barrier program, facts, 15827

keeping screwworms out of United States, questions and answers, 10156

Scribbling low force, film coating permits, 6772

Scrub oak, *see* Oak.

SCS, *see* Soil Conservation Service.

Scuba, *see* Aqualung.

Scull, J. R., spacecraft guidance and control, 6730

Sculpture and statuary, statute of Dennis Chavez, acceptance, proceedings, 4570

Scyllac, Ad Hoc Panel on, *see* Ad Hoc Panel on Scyllac.

SD series, 16474

Se habla espanol, help for Spanish-speaking youngsters, 13964

Sea, *see* Ocean—Water pollution.

Sea anemones, burrowing acontiate anemone, new California species, 6952

Sea cucumbers, psolid holothurian genus *Lisothuria*, 8550

Sea food:

irradiation pasteurization, effect on microbial flora surviving, 1800

radiopasteurization, shipboard irradiator studies, annual report, 5791

recipes, low-calorie, seafood slimmers, 8026

Sea, Freedom of the, *see* Freedom of the seas.

Sea grant colleges, *see* Colleges and universities.

Sea ice, physical properties, understanding variations, 15931

Sea level, elimination of rocket engine asymmetric loads during tests, 6831

Sea mink, *see* Minks.

Sea nettles, *see* Jellyfish.

Sea otters, protect, law, 416

Sea archins:

echinoids of Dominica, 5316

new echinoid from Cretaceous Pierre shale of eastern Wyoming, 2363

Sea water:

air bubble properties at air/sea interface, influence of surface-active material, 17088

contamination of Navy fuel oils, microwave monitoring, 15637

deposition of barium sulfate from sea water in oil-well rotary pumps, 11386

Desalination—

A-B-seas of desalting, 4912

agreement with Union of Soviet Socialist Republics, 11841

and energy development, etc., policy considerations, 15969

Sea water—Continued

desalination—continued
 appropriations, expand program, etc.,—
 hearing, 9322
 law, 12172
 reports, 10561, 10753
 by electrosorption and desorption, 6445
 conceptual design of desalination
 plant—
 and test module, 8216
 replacement for demonstration plant
 at Point Loma, San Diego, Calif.,
 15330
 250 MGD plant, 2396
 demonstration plants corrosion test
 program, 9594
 desalting for Athens, Greece, prelimi-
 nary study, 10314
 desalting versus conventional water sys-
 tems in Texas, cost calculating proce-
 dures and methods, 12645
 direct freeze separation using refriger-
 ant R-C318, 12644
 distillation equipment, USSR diagram,
 etc., 11270
 foam fractionation, 12642
 international symposium, proceedings,
 9857, 12124-215
 liquid-liquid heat transfer, 14200
 nuclear energy for water desalting, bib-
 liography, 12014
 policy considerations (remarks), 10313
 report, 11216
 Texas, potential contribution to future
 water supply, 15328
 thermophysical properties of saline
 water systems, 12643
 USSR technical publications, transla-
 tions, 13313
 desulfurization processing, preliminary studies,
 6688
 horizontal spray film evaporator, heat
 transfer coefficient and evaporating seal-
 ing tendencies, 6440
 hot, corrosion in, in experimental loop
 apparatus, investigation, 15326
 mass transfer properties, 2393
 nuclear power-desalting combination proj-
 ect—
 hearings, 7749, 7813
 laws, 375, 10487
 reports, 675, 6078, 7731, 9125
 nucleation and growth of ice crystals, 6442
 salt water distillation facilities, federally
 owned, sale to government of Virgin
 Islands, Virgin Islands Corporation, In-
 terior Dept., General Services Adminis-
 tration, GAO review, 8146
 temperature and density, Pacific Coast,
 17466
 temperature, frequency spectrum of short-
 period fluctuations, USSR study, 1180
 thermal distillation, fundamentals of
 theory of marine evaporators, 17390
 Seabees, naval construction battalions, 25th
 anniversary, commemorative medal, law,
 487
 Seabirds, *see* Water birds.
 Seaborg, Glenn T.:
 addresses, etc.
 Oct. 23, 1966, 134
 Oct. 24, 1966, 133
 Nov. 2, 1966, 132
 Nov. 3, 1966, 135
 Nov. 8, 1966, 1815
 Nov. 17, 1966, 130
 Dec. 13, 1966, 1818
 Jan. 10, 1967, 4243
 Jan. 13, 1967, 4244
 Jan. 19, 1967, 4240
 Jan. 27, 1967, 4247
 Feb. 6, 1967, 4246
 Mar. 1, 1967, 5799
 Mar. 3, 1967, 7439
 Mar. 29, 1967, 7438
 Apr. 25, 1967, 8915, 8918

Seaborg, Glenn T.—Continued

addresses, etc.—continued
 May 9, 1967, 10307
 May 11, 1967, 10315
 May 12, 1967, 10310
 May 26, 1967, 10306
 May 31, 1967, 10305
 June 5, 1967, 10318
 June 9, 1967, 10319
 June 26, 1967, 12021
 July 3, 1967, 12022
 July 5, 1967, 12023
 Aug. 31, 1967, 15972
 Sept. 9, 1967, 15970, 15975
 Sept. 19, 1967, 15976
 Sept. 27, 1967, 15974
 Oct. 19, 1967, 17404
 Oct. 22, 1967, 17401
 Oct. 23, 1967, 17402
 Seafaring wage rates, Atlantic, Gulf and
 Pacific districts, 14313
 Seafood, *see* Sea food.
 Seal of United States, *see* Seals (numis-
 matics).
 Seal-off assembly permits rapid evacuation of
 air from containers, 1450
 Sealab Project, *see* Project Sealab (man-in-
 the-sea, program).
 Sealants, *see* Sealing compounds.
 Sealers, Federal item identification guides for
 supply cataloging, supplements, 3290
 Seallift, *see* Transportation.
 Seallift magazine, 3854
 Sealing:
 chemical sealing of soils, feasibility study,
 17849
 refractory metals by vapor deposition,
 14432
 self-sealing closure enables access, 14417
 silver plating technique seals leaks in thin
 wall tubing joints, 6699
 Sealing compounds:
 depth control of potting compound for
 honeycomb sandwich fasteners, study,
 6834
 sealants, survey, 5195
 Seals (animals):
 fur seals, Pribilof Islands, protect and con-
 serve, law, 416
 Northwest Atlantic Fisheries Convention,
 multilateral understanding, protocol,
 2896
 pelagic fur seal investigations, 14062
 Seals (numismatics):
 Federal Aviation Agency, FAA regulations,
 11003-4
 great seal of United States, control—
 law, 511
 report, 4583
 seal of President of United States, control,
 report, 4583
 Senate, history, 2080
 Seals and glands:
 cryogenic seal remains leaktight during
 thermal displacement, 12837
 face contact seal in liquid sodium perform-
 ance improved by incorporation of spiral-
 groove geometry, 11505
 impregnated mechanical carbons, wear and
 friction at temperatures to 1400° F in
 air or nitrogen, 9915
 large seals fabricated from small segments
 reduce procurement lead time, 1461
 screw-seal performance in vacuum envi-
 ronment, 6885
 segmented, arch-bound carbon seal is pres-
 sure loaded, 16959
 static seal concept to accommodate seat
 tolerances, 15549
 static seal provided by combination spacer
 and gasket, 2630
 vacuum chamber remotely sealed by eutec-
 tic metal, 11390
 visco seal design offers zero-leakage, etc.,
 8470

INDEX 1967

Seamans, Robert C., jr., address, July 14, 1966, 2733
 Seamen, *see* Sailors.
 Seamless tube production, USSR, 2467
 Seamounts, internal magnetization and its computer calculation, 12612
 SEARCH, administrative research bulletin, 11890
 Search and rescue operations for U.S. private pilots missing in foreign areas, hearing, 16329
 Search radar, *see* Radar.
 Searches and seizures, law of search and seizure, handbook, 12763
 Searcy, James K., use of riprap for bank protection, 14640
 Seas, *see* Inland seas—Ocean.
 Seas, Freedom of the, *see* Freedom of the seas.
 Seasonal changes among endocrine-metabolic indices of men residing in subtropical climate, 7358
 Seasonal variations (economics):
 X-11 variant of census method II seasonal adjustment program, 5902
 Seat belts, *see* Automobile seat belts.
 Seaton, Stuart L., gas density measurements using light scattering, 11490
 Seats:
 aircraft ejection-seat system, foreign produced, procurement by Defense Department, GAO review, 4881
 aircraft passenger seat cushions, flotation characteristics, 137
 aircraft passenger-seat-system response to impulsive loads, 17388
 automotive seat backs, padding, Federal standard, 6329
 automotive vehicles, anchorage, Federal standard, 6320
 stadium seating, market analysis, 14132
 Seattle, Wash., area wage survey, 6009
 Seaweeds, control, law, 434
 SEC, *see* Securities and Exchange Commission.
 Secchi, AIC 61C, 1444 chart, 7325
 Seckler-Hudson, Catheryn, Federal textbook on citizenship, our Constitution and Government, 12631
 Secobarbital, hangover effect on simulated pilotage performance, 7364
 Second breakdown in semiconductor devices, bibliography, 18082
 Second look, progress report on Federal employment of mentally retarded, 16083
 Secondary education:
 elementary and secondary education act—amendments of 1966—
 administration of programs, notes and working papers, 10865-867
 law, 462
 amendments of 1967—
 hearings, 7742, 9153, 12419, 17664
 reports, 9118, 10557
 annual report under title 1, 7890
 ESEA amendments, what's new, 6198
 grants, application forms, instructions under title 1, 16503
 grants, guidelines under title 2, 16513
 handicapped children, State plan programs guidelines, 10933
 PACE, projects to advance creativity in education, supplementary services and centers, 2189, 7915, 10940-941, 17723
 profile, 9406
 staffing for better schools under title 1, 16511
 title 1, school year 1965-66, highlights, 15218
 Israel, modern system, national development, 6187
 offerings for academically and culturally deprived pupils (address), 7903
 space oriented geometry, supplement, 8513

Secondary schools, *see* High schools—Secondary education.
 Secretaries:
 opportunities in State Department, 11831
 opportunities in Washington, D.C., Internal Revenue Service, 11223
 overseas opportunities, State Department, 8722
 so you want to be a secretary, 15207
 Secretary of Senate, *see* Senate.
 Securities:
 act of 1933—
 amended, 11784
 general rules and regulations, 5484
 releases, SEC, 3856
 corporate equity ownership and in corporate takeover bids, full disclosure—
 hearings, 13846
 report, 15133
 foreign government obligations, purchase by Federal reserve, authorize—
 hearing, 7800
 report, 9281
 foreign, interest equalization tax act, extend—
 digest of testimony and statements, 9176
 hearings, 6047, 13859
 law, 13539
 legislative history, 15052
 reports, 7670, 7708, 13689, 13823
 income tax treatment of certain straddle transactions, report, 2024
 issued by State and local governments, authority of national banks to underwrite, hearings, 16396
 member State banks, Federal reserve regulation, 11057
 redeemable, list, 11051
 traded on exchanges, annual listing, 11785
 quarterly supplement, 3858
 transactions and holdings, 3653
 see also Government securities.
 Securities and Exchange Commission:
 appropriations, 1968—
 hearings, 9145, 15147
 reports, 10600, 15131
 companies filing annual reports directory, 15112
 decisions and reports, bound volume, 8676
 general rules and regulations under securities act of 1933, 5484
 general rules and regulations under securities exchange act of 1934, 11782
 investment advisers act releases, 3444
 investment company act releases, 3445
 member, nomination of Richard B. Smith, hearing, 9307
 news digest, 3630
 releases, 2983, 3153, 3399, 3516, 3856-57, 3901, 3979
 report, 1966—
 departmental edition, 5483
 document edition, 4484
 report on public policy implications of investment company growth, report, 2035
 rules of practice, rules relating to investigations and core of behaviour governing ex parte communications, 11783
 statistical bulletin, 3899
 work, 5485, 15727
 Securities exchanges:
 act of 1934—
 amend—
 hearings, 12846
 report, 15133
 companies filing annual reports, directory, 13112
 general rules and regulations, 11782
 releases, SEC, 3857
 code of Federal regulations, 12524
 Securities investigators, examination announcement, discontinuance notice, 7543
 Security, *see* Military security—National defense—National security.

Security of vessels and waterfront facilities, 10448
 Security warning system monitors up to 15 remote areas simultaneously, 2605
 Sedan project 62.80c aeroradioactivity survey, 12002
 Sedatives, *see* Hypnotics and sedatives.
 Sedgewick, C. H. Wallace:
 crude petroleum and natural gas, 5847
 oil and gas extraction, 7465
 oil and gas field services, 1854
 Sediment porosity meter, feasibility study, 10303
 Sedimentary rocks:
 Colorado, Kansas, Montana, etc., chemical composition, 14172
 gold-bearing, in northwest Wyoming, preliminary report, 9569
 mass properties, and gravimetric effects of petroleum and natural gas reservoirs, 12608
 mass properties as related to petroleum exploration (series), 12608
 Sedimentation and deposition:
 Cache Creek drainage basin in coast ranges west of Sacramento, Calif., sediment transport, 11181
 deposition of barium sulfate from sea water in oil-well rotary pumps, 11386
 flood of Dec. 1964 on Coffee Creek, erosion and deposition, 17823
 Mississippi River Delta, monitoring agricultural pesticide residues, preliminary report of studies, 4086
 petrology of sediments underlying areas of land subsidence in central California, 12607
 radiolotope gauge for monitoring suspended sediment concentration in rivers and streams, 1794
 sediment nearshore environment, instrumentation, by multipurpose data acquisition system, 16522
 sediment porosity meter, feasibility study, 10303
 sediment transport in alluvial channels (series), 11181, 16695
 sediment yields from high mountain watersheds, central Colorado, 2332
 See Hom Sheck, *see* Hom Sheck See, and wife.
 See the United States, program, extend through 1967, report, 9292
 Seed crops, *see* Crops.
 Seedbeds:
 density affects size of 3-0 green ash nursery stock, 14095
 prescribed burning improves Piedmont loblolly pine, 12582
 shortleaf pine seedling inventory methods on broadcast-seeded areas, 8072
 Seeding, *see* Forest planting.
 Seedlings, coniferous, snow damage, 1091
 see also names of plants or trees.
 Seeds:
 bitterbrush, measuring production on plants with variable crown density, 11122
 Federal seed act—
 amend, law, 400
 State noxious weed seed requirements in administration, 2138
 supplement, 2139
 field, acreage, yield, production, etc. U.S., 1960-64 crop years, 8755
 field seeds, supply and disappearance, crop years 1959-64, U.S., 5680
 foreign agriculture circulars, 3345
 fourwing saltbush, percentage fill, 11128
 seed crops—
 forecast, 3859
 prices, 3860
 stocks report, 3861
 seed fall and regeneration from group selection cut, 1st year results, 4840

Seeds—Continued
 size and germination of white pine seed collected at weekly intervals, 12580
 trees and shrubs, dealers' directory, 8125
 what producers, processors, distributors, and suppliers should do in national emergency, 1715
 see also Grasses—*also* names of plants.
 Seeds/also National Wildlife Refuge, birds, 11st, 11086
 Seefeldt, August C., relief, 336, 603
 Seefeldt, Merritt A., relief, 336, 603
 Seegrist, Donald W., measuring bitterbrush seed production on plants with variable crown density, 11122
 Seeley, David S.:
 address, Nov. 16, 1966, 4718
 desegregation guidelines, 9398
 Segal, Dorothy B., index-catalogue of medical and veterinary zoology, 14-15, 13205
 Segel, L., rotor air loads, etc., caused by transient inputs of shaft torque as related to stoppable rotor operation, 13308
 Segmented, arch-bound carbon seal is pressure loaded, 16959
 Seidel, Kenneth W.:
 cordwood yields from thinnings in young oak stands in Missouri Ozarks, 2307
 shortleaf pine seedling inventory methods on broadcast-seeded areas in Missouri Ozarks, 8072
 Selden, Jacob, research review, Office of Aerospace Research, 3827
 Seisdedos, Manuel Alpendre, *see* Alpendre
 Seisdedos, Manuel.
 Seismic waves, *see* Tsunami (tidal wave).
 Seismograms, principles underlying interpretation, 1935
 Seismology:
 Alaska research studies, engineering seismology, 12117
 Antarctic seismological bulletin (periodical), 3032
 engineering seismology bulletin, 3793
 Parkfield, Calif., earthquake, report, 1934
 Parkfield-Cholame Calif., earthquakes of June-Aug. 1966, data, 9574
 seismic decoupling at nuclear level, project Dribble, Salmon event—
 earth vibrations from nuclear explosion in salt dome, 3911
 seismic velocity determination and distance measurements in salt dome, 1808
 timing and firing, 1810
 vent-gas treatment plant, 1809
 seismic reflection profiles along drill holes on continental margin off Florida, 15311
 seismicity of Yakutia, USSR book, 16769
 seismological bulletin (periodical), 3862
 South Pole-Byrd supplement, 3863
 Selby, Rose T., premium pay provisions for weekend work in 7 continuous-process industries, 5057
 Select Commission on Western Hemisphere Immigration, appropriations, 1967, supplemental hearings, 2040
 Selecting a harem and other applications of policy-capturing model, 15893
 Selections from Historic American Buildings Survey, 11616
 Selective service, *see* Conscription.
 Selective Service, National Advisory Commission on, *see* National Advisory Commission on Selective Service.
 Selective Service System:
 annual report, 2852
 appropriations, 1968—
 hearings, 9145, 15147
 reports, 10600, 15131
 local board memoranda, 3521
 regulations, 3871
 special monographs, 11786-788
 Selenium:
 materials survey, 16854
 mineral market report, quarterly, 3872

INDEX 1967

Selenium rectifiers, *see* Rectifiers.
 Self and service enrichment through Federal training, annex to report of Presidential Task Force on Career Advancement, 10030
 Self-organizing control systems, 9617
 Sellg, S. M., naval research logistics quarterly, 3606
 Sellers, Bach:
 generation and practical use of monoenergetic X-rays from alpha emitting isotopes, 4234
 radioisotope gauge for monitoring suspended sediment concentration in rivers and streams, 1794
 Selling, *see* Salesmen and salesmanship.
 Selling to AEC, errata, 4245
 Selling to military, 2158
 Selling to Navy prime contractors, 17100
 Sellmann, Paul V., geology of permafrost tunnel, Fairbanks, Alaska, 17378
 Semenov, Nikolay, USSR academician, press interviews, 12706, 14233
 Semi-active gravity gradient system, *see* Satellites.
 Semiconductors:
 conference on production, Hungary, 9634 devices—
 fabrication by transmutation doping, 12010
 high reliability screening, 9800
 process controls introduction of selected impurities into wafers, 16949
 second breakdown, bibliography, 18082
 tested without removing from circuitry 2622
 ultrachemical analysis, status, 11467
 Seminar on intense neutron sources, proceedings, 13315
 Seminar on Manpower Policy and Program, proceedings, 5041-45, 17886
 Seminole County, Fla., soil survey, report, 2876
 Semiotics, problems, cybernetics in service of Communism, USSR studies, 12742
 SEMIRAD (secondary-electron mixed radiation dosimeters), *see* Dosimeters.
 Semmler, R. A., isotopic X-ray sources for portable stress analysis equipment, 14809
 Senate:
 appropriations, 1968, legislative—
 amendments, 13723
 hearings, 12398
 law, 13537
 reports, 13672, 13813
 calendar, executive, 3503
 calendar of business, 3487
 classification of United States Senators, 762
 committee funds authorized and expended for inquiries and investigations, staff study, 4659
 delegation—
 7th Mexico-United States Interparliamentary group meeting report, 12408
 9th meeting of Canada-United States Interparliamentary Group, report, 764
 10th meeting of Canada-Interparliamentary Group, report, 15058
 invitations from foreign governments, etc., President of Senate to respond, 10781
 journal, 89th Cong., 2d sess., 6050
 legislative employees, training opportunities, report, 16232
 manual, 10691
 office space, additional, hearing, 15176
 officers and employees, training under Government employees' training act, hearing, 16431
 seals, history, 2080
 Secretary Emery L. Frazier, tributes upon retirement, 2075
 Secretary, reports, 7768, 15060
 Senator Leverett Saltonstall, tributes upon retirement, 2077
 Senator Spessard Lindsey Holland, tributes commemorating 20 years of service, 765

Senate—Continued
 standing committees and committee assignments of Senators—
 89th Congress, list, 758
 90th Congress, list, 9179
 standing rules, study, authorization, report, 4612
 subcommittees, together with select, special and joint committees, list,—
 89th Congress, 2d session, 759
 90th Congress, 1st session, 7766
 telephone directory, 760, 10689
 Senate bills, enactment into law, procedure, print revised edition, report, 12369
 Senate documents, 761-767, 2067-80, 4569-73, 6051-63, 7768-79, 9180-83, 10690-702, 12320-323, 13720-724, 15055-61, 16347-350, 17615-617
 Senate executive documents, 4574-75, 7771-72, 9184-86, 10703, 13725, 16351, 17618
 Senate executive reports, 6064-67, 7773-75, 9187-90, 13726, 15062-64, 16352, 17619-620
 Senate reports:
 private bills, 768-872, 2081-82, 4576-80, 9191-9263, 10704-725, 12324-358, 13727-788, 15065-73, 16353-358, 17621
 public bills, 878-936, 2083-2120, 4581-4627, 6068-87, 7776-89, 9264-98, 10726-795, 12359-395, 13789-837, 15074-143, 16359-386, 17622-632
 Senators, *see* Senate.
 Seneca Indians, morphology and dictionary, 13001
 Senegal:
 agricultural economy in brief, 992
 background notes, 17215
 labor conditions, 2512
 mineral industry, minerals yearbook chapter, 8363
 Seney National Wildlife Refuge, birds, list, 17778
 Senior citizens, *see* Aged.
 Senior Citizens Month, May 1967, guide to community action and year-round activity, 8302
 Senra, Antonio J., and wife, relief, 532
 Sense organs, sensory impairments, estimated range and cost of disability, 17745
 Sensitivity:
 experiments, computer program simulates, 11439
 radiation, of structural steels, metallurgical variables as possible factors controlling, initial evaluations, 5357
 testing, of explosives, combination statistical design, 9754
 theory, application to space vehicle flight control systems, 12873
 Sensors:
 acceleration, having various mounting characteristics, dynamic response to impact loadings, 11521
 attitude, for spacecraft, survey, 12882
 electrochemical carbon dioxide, 17354
 flow-test device fits into restricted access passages, 9840
 glow discharge density, probe life extended, 14430
 heat flux sensor design reduces extraneous source effects, 2636
 humidity, fluidic oscillator used for measuring, 8473
 image, transfer characteristics, plotter design simplifies, 12915
 in-flight ablation measurements of thermal-protection materials, 1494
 inertial testing, limitations produced by test platform vibrations, 1492
 measure surface ablation rate of reentry vehicle heat shield, 6758
 point-source light, circuit insensitive to background light, 2637
 polarographic oxygen, new electrolyte may increase life, 6740
 pressure, miniature capacitor devised, 6747

Sensors—Continued

- remote—
 - light sources for sensing systems, 16893
 - sensing, potential from space platforms, agricultural application, 15843
 - survey of detectors and dynamic calibration methods, 3809
 - star sensor fields of view determined by analytical approach, 11557
- Sensory Aids and Prosthetic Service, Veterans Admin., *see* Prosthetic and Sensory Aids Service, Veterans Admin.
- Sensory deprivation :
 - effects of sensory deprivation on sensory, perceptual, motor, cognitive, and physiological functions, 8419
 - prolonged stage 4 and 1-REM sleep deprivation, comparison of effects, 15900
- Sensory diseases, *see* Sense organs.
- Sentences (legal) :
 - appellate review, provide, report, 12394
- Separation processes :
 - heavy liquid cyclone, concentration of minerals, 12822
 - technique provides rapid quantitative determination of cesium-137 in irradiated nuclear fuel, 12845
- Sepsidae, *see* Flies.
- Sequential analysis, finite sequential machines, generalized decomposition theory, 18008
- Sequential machines, *see* Sequential analysis.
- Sequential tests, nonparametric, randomness in sequences, 5248
- Sequoia National Park, map, 5321
- Serial set (congressional), 247-249, 1967-69, 4458, 7587, 10473-475, 12141-142, 16119-121, 17486-489
- Serials :
 - catalog of copyright entries, 12432, 16451
 - new serial titles—
 - classified subject arrangement, 3626
 - union list, alphabetical arrangement, 3627
- Series ISPO 1, 182, 1885, 4360, 5898-99, 7496, 10387
- Seris, H., measurement of low frequency vibrations in big helicopters and their transmission to pilot, 11564
- Serpan, Charles Z., Jr. :
 - neutron exposure criteria for evaluating embrittlement of reactor pressure vessel steels, 5355
 - neutron spectral considerations affecting projected estimates of radiation embrittlement of Army SM-1A reactor pressure vessel, 1554
 - through-thickness notch ductility and tension properties as function of neutron exposure to simulated pressure vessel wall of A 302-B steel, 17093
- Serpentine :
 - alpine type serpentinites, metasomatic reaction zones related to emplacement and formation, 17817
 - minerals, reevaluation of differential solution method, 8120
 - thermodynamic properties, 11387
- Serpukhov, Russian SFSR, radiotelescope, construction completed, 8255
- Serum and serumtherapy :
 - human serum parameters for simulated altitude aerospace flights, change in—
 - albumin, gamma globulin, albumin/gamma globulin ratio, and A/G ratio, 3868
 - potassium, sodium and chloride, 7341
 - protein concentration, 7342
 - serum cholesterol levels of adults, 8661
 - serum glucose levels, periodontal status, 4178
 - serum ionic calcium measurement by use of specific ion electrode, 13271

Servants:

- Illinois labor laws relating to private-household workers, fact sheet, 10137

Servants—Continued

- social security—
 - coverage for household employees, 11795
 - good news for household workers, 7122
 - household employer's tax guide, 2401
 - household worker statistics, 2871
- Service, Alfred L., evaluation of western phosphate industry, and its resources, trends and outlook, 11371
- Service and regulatory announcements, Consumer and Marketing Service, 964, 6132
- Service contract act of 1965, *see* Government contracts.
- Service Corps of Retired Executives :
 - new ideas? ask SCORE, 13116
- SCORE, general information, 18201
- Service establishments, retail and service enterprises and establishments under fair labor standards act as amended, 8788
- Service industries :
 - census of business, 1963, selected services, subject reports, bound volume, 8932
 - East European, translations, 3958
 - health service industry, technology and manpower, 1965-75, report, 11297
 - problems and prospects (address), 15985
- Service records, *see* Military records.
- Service ribbons, Navy and Marine Corps, ribbons of decorations and awards (poster), 11663
- Service stations, gasoline, census of business, 1963, retail trade, 4270
- Service trades :
 - census of business, 1963, selected services, subject reports, bound volume, 8932
 - current selected services report, 7490
 - equipment, Federal item identification guides for supply cataloging, supplements, 3287
 - recordkeeping systems, bibliography, 2856
 - selected services, monthly receipts, 7490
- Service, USDA's report to consumers, 3873
- Servicemen, *see* Armed Forces.
- Services for Indians, 16517
- Services for you from USDA's Consumer and Marketing Service, 1711
- Services to public provided by Wage and Hour and Public Contracts Divisions, 1666, 8789
- Serving America as woman marine, 11341
- Serving those who serve children, 2532
- Servomechanisms :
 - hovering performance characteristics of rotor with and without blade-pitch servo-control flaps, 5260
 - quick-response servo amplifies small hydraulic pressure differences, 6696
- Sesco, Jerry A., stadium seating, market analysis, 14132
- Setien, Alberto J. Otelza, *see* Otelza, Alberto.
- Setun, *see* Electronic computers.
- Seven steps to equal employment opportunity, 4750
- Severance, Roger D., establishing business in Iran, 13487
- Severance pay, *see* Salaries.
- Severe Storms Laboratory, *see* National Severe Storms Laboratory.
- Sevier River and Valley, upper basin, ground-water conditions and geologic reconnaissance, 14180
- Sevine, hog-lot equipment, 17312
- Sewage :
 - municipal waste treatment and future construction needs, Federal incentive grants, report, 8019
 - Potomac interceptor sewer, increase Federal contribution to cost—
 - hearings, 13703, 13858
 - law, 17538
 - reports, 14995, 15101
 - sewerage systems, community, minimum design standards, 4908
 - treatment equipment, Federal item identification guides for supply cataloging, supplements, 3288

INDEX 1967

Sewage—Continued

- waste disposal systems, financial assistance to small towns and rural groups in Oklahoma, questions and answers, 7945
- waste treatment, selected biological references, 8011
- wastewater utilities, capital expenditures, 1964, distribution, 4260
- water and sewer facilities grant program, HUD consumer bulletin, 17835
- water and wastewater facilities, 1955-80, regional construction requirements, 17417
- Sewall, John L., vibration analysis of cylindrically curved panels, etc., 5263
- Sewall, Robert L., five-year market forecast for commuter railroad cars, 4261
- Seward, Alaska earthquake of Mar. 27, 1964, effects, 11175
- Sewerage, *see* Sewage.
- Sewers, *see* Sewage.
- Sewing:
 - by hand, teaching guide for home economics program aides, 7286
 - fix new clothes to make them last longer, 7287
 - simplified clothing construction, 14743, 17314
- Sewing machines, bag sewing operations, how to inspect chart, 9688
- Sex, discrimination in employment, laws, 17295
- Sex instruction:
 - family life and sex education—articles, 16044
 - bibliography, 6184
 - goodbye to birds and bees, 10932
- Sextants, navigation measurements during lunar module rendezvous, analysis, 6903
- Sexual organs, *see* Generative organs.
- Seychelles:
 - background notes, 14667
 - capsule facts for Armed Forces, 15920
 - labor conditions, 5078
 - tracking stations, facility on Island of Mahé, agreement with Great Britain, 18447
- Seymour, Thomas H., fire and explosion prevention and protection, 8295
- SFCSI, special foreign currency science information program, 7551, 17464
- Shacklette, Hansford T., copper mosses as indicators of metal concentrations, 4886
- Shad, American, tagging summary, 8037
- Shadow box optical landing system, 11680
- Shafey, Sherif, relief, 9212, 12152, 12219
- Shafirin, Elaine C.:
 - critical surface tension for spreading on liquid substrate, 10006
 - effect of adsorbed water upon spreading of organic liquids on soda-lime glass, 13110
- Shafts, supercritical, on flexible supports, analysis of dynamics using transmission line analogy, 1773
- Shakers (apparatus):
 - use for determination of fixed base natural frequencies of shipboard equipments, 11673
 - vibrator elapsed time, automatically controlled, 15548
- Shale:
 - Chattanooga, investigations, 9783
 - Pierre:
 - stratigraphy, paleontology, and sedimentation of classic reference locality (series), 2363, 8161
 - upper Cretaceous gastropods, Red Bird, Wyo., 8161
 - upper Cretaceous, Red Bird section, Wyo., 2363
 - see also* Oil shale.
- Shale oil, specific gravity from Colorado's Green River formation, 2587

- Shambon, Arthur, spectral energy distribution of unfiltered X-rays from 250 kV constant potential machine, 1789
- Shanghai, China, Municipal Bureau of Machine and Electrical Industries, product standards, Communist China, 12759
- Shanholtz, V. O., computer systems for reduction and analysis of hydrologic data, 13197
- Shannon, Ira L.:
 - Carlson-Crittenden device for collection of human parotid fluid, 10240
 - dental caries status of U.S. Air Force enlistees, 7353
 - effect of—
 - rate of gland function on parotid fluid uric acid levels, 11959
 - uricosuric drug administration on uric acid levels in unstimulated parotid fluid, 11960
 - hyperhydration and parotid flow in man, 7349
 - mental exercise effect on parotid flow rate, 11963
 - parotid fluid flow rate and periodontal status in human, 11965
 - parotid versus extra-parotid flow in human, 11961
 - periodontal status in relation to parotid fluid and serum glucose levels, 4178
 - rapid transfer of cortisol from bloodstream to parotid fluid, 11962
- Shanny, Rany A., numerical experiments in plasma physics, 1791
- Shapers (tools):
 - wood shaper, how to inspect chart, 9692
- Shapes (metal):
 - Federal item Identification guides for supply cataloging, supplements, 3288
- Shapes of tomorrow, supplement in space oriented geometry for secondary levels, 8513
- Shapiro, H., synthesis of higher order hydrocarbons on hot tungsten filaments, 8504
- Shapiro, Karl, Randall Jarrell, lecture, 12750
- Shardnand, absorption coefficients of O₂ at oxygen windows, 18050
- Share-cropping:
 - employer-employee relationships in agriculture sharecropping—
 - arrangements or landlord-tenant agreements under fair labor standards act, guide, 13176
 - arrangements provide for shares of crops as rental payments in farm operations, 7223
- Sharkey, Andrew G., jr.:
 - analytical methods of mass spectrometry, 11351
 - comparison of products from high-temperature irradiation and carbonization of coal, 2572
- Sharks:
 - calligoid copepods parasitic on sharks of Indian Ocean, 6955
 - genus *Isurus*, revision and description of new species, 6946
 - hammerhead sharks (family Sphyrnidae), revision, 9052
- Sharp, Ulysses G., testimony, 16394
- Sharpnack, David A., predicting volumes in 4 Hawaii hardwoods, 1st multicariate equations developed, 8084
- Shaw, Byron B., use of quality and quantity of publications as criteria for evaluating scientists, 1709
- Shaw, Henny L., history of Marine Corps operations in World War II central Pacific drive, 12783
- Shaw, Van E., extraction of euxenite metal values by fusion with ammonium sulfate or ammonium bisulfate, 6685

Shaw, William H.:
nomination, hearings, 6094
remarks—

Oct. 24, 1966, 235
Nov. 22, 1966, 1966
Feb. 7, 1967, 5950
Feb. 23, 1967, 5949
Mar. 18, 1967, 7565
Mar. 28, 1967, 7570
May 11, 1967, 10453
Aug. 3, 1967, 13453
Oct. 23, 1967, 17471

Shawe, D. R., bedded barite in East North-
umberland Canyon, Nye County, Nev.,
16689

Shawnee County, Kans., geology, 11161

Shea, John J., relief, 10536, 13510, 13755

Shea, Timothy J., and wife, relief, 831,
13730

Shear (mechanics):

combined effects of buoyancy and shear on
weak homogeneous turbulence, 11542

Shearer, Raymond C.:

development of ponderosa pine progeny in
western Montana, 6365

isolation limits initial establishment of
western larch seedlings, 14088

performance of 14-year-old plus ponderosa
hybrids in western Montana, 8067

Shearin, John G., experimental simulation of
reaction jet damping and attitude control
system for spinning body, 8485

Sheck See Hom, see Hom Sheck See, and
wife.

Shedd, Edward S., electrowinning and tap-
ping of lanthanum metal, 2586

Sheep:

bluetongue incidence, 13

on feed, 5556-57, 5681, 8759

scabies, eradication, methods, etc., 5666

stocker and feeder, shipments, 3875

Sheep ranges, see Range lands.

Sheet glass, see Glass.

Sheet metal:

Federal item identification guides for sup-
ply cataloging, supplements, 3288

sheet-metal ware, making, classification
definitions, 17104

titanium alloy sheet, fracture toughness,
11552

Sheet-plastic, thin plastic sheet eliminates
need for expensive plating, 6836

Sheets, current industrial reports, 4339-40,
12680, 17435

Sheffer, Herman W., mineral industry of
Utah, 5121

Sheffield, George V., Livermore 1-2 stellera-
tor, 13329

Shelbley, Dean W., infrared spectra of metal
oxides, 2723

Shiefer, Victor J., white-collar pay supple-
ments, expenditures of employers in pri-
vate industry, 6620

Shekarchi, E.:

mineral industry of—

Ceylon, 8344

Cyprus, 6648

Iran, 8353

Pakistan, 8361

Turkey, 8369

Shelby County, Tenn., employment, adminis-
tration of justice, and health services, civil
rights report, 14851

Shellfish:

Alabama landings, 3024, 16616

buying guide, and recipes for school
lunches, quantity amounts, 15257

California landings, 3073

Florida landings, 3338, 16611

Georgia landings, 3378, 16613

Louisiana landings, 1075, 3530

Maine landings, 3533, 12541

Maryland landings, 3545, 17770

Massachusetts landings, 3546

by ports, summary, 12543

Shellfish—Continued

Mississippi landings, 3564, 16615

New Jersey landings, 3621, 12540

New York landings, 3628, 14054

North Carolina landings, 3638, 17771

Oregon landings, 17769

Pacific Coast fisheries, annual summary,
9510

poisoning, feasibility of mass outdoor cul-
tivation of *Gonyaulax catenella*, 15684

production areas, national register, 7078

radiation pasteurization, summary report,
13341

Rhode Island landings, 3836, 12542

sanitation research, Northwest planning
conference, proceedings, 15683

shipper, list, 3089

situation and outlook (periodical), 3874

South Atlantic fisheries, annual summary,
9505

South Carolina landings, 3884, 16614

Texas landings, 3934

Virginia landings, 4038, 16618

Shells (aircraft):

spherical closed sandwich shells, natural
frequencies, determined by computer
program, 16939

stiffness matrix solution for shells of revo-
lution processing variable thicknesses

heat protection, 11514

Shells (ordnance):

excise taxes, amend internal revenue code,
reports, 2027, 7695

Shells (structural):

axially symmetric response of elastic cy-
lindrical shell partially filled with
liquid, 6907

computer program for finite-difference solu-
tions of shells of revolution under asym-
metric loads, 11497

configuration modifications effects in aero-
dynamic characteristics of tension shell
shapes, 14475

conical, truncated—

prebuckling deformation influence on
buckling load, 5187

sandwich and ring-stiffened, subjected
to external pressure, effect of edge
constraint on buckling, 11417

cylindrical, thermoelastic and viscoelastic
sandwich construction equations, 1436

deformation of shallow spherical sandwich
shells under local loading, 6895

eccentrically stiffened shallow shells of
double curvature, 6873

nonlinear problems, incremental procedure
for solution, 2727

paraboloidal shells of revolution, dif-
ferential equations of axisymmetric vi-
bration, 17946

tension shell and blunted 100° conical
shapes for unmanned entry vehicles,
transonic aerodynamic investigation,
1504

vibration and buckling of prestressed
shells of revolution, 6878

see also Tension shells.

Shells (toroidal):

pressurized—

investigation, 11454

vibration study, 16907-908

Shelter belts:

northern Great Plains, 1689

tree planters' notes, 1099, 8125-27

Sheltered workshops, pathway to regular
employment, 6593

Shelters, see Picnic shelters.

Shelters (protective), see Protective shelters.

Shelterwood method for regenerating sand
pine, 9539

Shenandoah (USS):

deployment to Malta, agreement, 2904

Shepard, Charles E., study of artificial
meteors as ablaters, 8480

INDEX 1967

Shepard, Harold H. :
 fertilizer supply, 8819
 pesticide review, 20
 Sheppards, Chas. N. :
 remarks—
 Nov. 3, 1966, 1061
 Nov. 11, 1966, 1069
 Mar. 8, 1967, 6298
 Shephard, C. M., high-rate batteries, 8596
 Sheppard, Harold L., worker attitudes in job seeking, 1021
 Sherer, D. G., fast reactor transient response and safety in selected accidents, 5772
 Sheridan, Douglas M., geology and uranium deposits of Ralston Buttes district, Jefferson County, Colo., 15308
 Sheridan, Eugene T., advance data on coke and coal chemicals, 15462
 Sheridan, Matthew J. :
 mineral industry of Nebraska, 2559
 urbanization and its impact on mineral aggregate industry in Denver, Colo., area, 6687
 Sherman, May, congenital heart disease, review of research grants supported by National Heart Institute, 15677
 Sherrill, William W., nomination, hearing, 9308
 Sherwin, C. W., 1st interim report on Project Hindsight, summary, 7837
 Sherwin, Chalmers W., address, May 3, 1967, 10457
 Sherwood, T. K., research on saline water conversion by freezing, 9593
 Sherwood Island State Park, behavior of beach fill and borrow area, 13976
 Shevchenko, Russian SFSR, distillation desalination equipment, diagram, equipment design, etc., 11270
 Shielding :
 ablative heat shield materials for X-15-2, arc-tunnel evaluation, 5238
 fallout radiation shielding, 14847
 irradiation of natural animal populations, design of shielded source, 1782
 radiation, applied to nuclear defense planning, analysis and design principles, 4384
 reactor shielding physics, problems, 12972
 shelter through architectural design, shielding requirements influence on form, 8981
 see also Heat shields.
 Shields, Joseph J., longwall mining in bituminous coal mines with planers, shearers-loaders, and self-advancing hydraulic roof supports, 6638
 Shields, Ruth H., depth of flash optical landing system, 13032
 Shields, William R., Analytical Mass Spectrometry Section, activities, 17041
 Shields :
 inert gas, monitored by portable spectrometer in welding process, 16960
 welders' hand-held shield, military standard, 9372
 Shigella, comparison of differential agar with Sellers citrate-mannitol-agar, 10233
 Shigo, Alex L., defects in birch associated with injuries made by *Xyloterinus pollus* Say, 4833
 Shiller, William R., dental caries increments evaluated by use of bite-wing roentgenograms, 14321
 Shimanouchi, Takehiko, tables of molecular vibration frequencies, 8524, 18077
 Shin Pond quadrangle, Maine, bedrock geology, 17825
 Shinn, Arthur M., jr., evaluation of ablative-material thrust chambers as components of storable-propellant rocket engines, 15555
 Ship models (church decoration) :
 duty-free entry for Lutheran Church of the Covenant, 7648, 14886, 16358

Ship pilots, Great Lakes, survey, supplements, 12777, 14309, 16834-836
 Ship Structure Committee :
 biennial report, 5487
 serial no. SSC, 5487-89, 7108, 10076
 Shipbuilding :
 acoustical measurements, USSR excerpts, 15418
 and conversion program, 2774
 construction for nonsubsidized merchant and fishing fleets, hearing, 946
 contracts, price increases, Navy Department, GAO review, 2351
 Nikolayevsk plant reviews it progress, USSR, 15368
 performance and payment bonds, Maritime Administration policy, etc., GAO review, 2350
 relative cost in various coastal districts of U.S., annual report to Congress, 12788
 safety and health regulations, 9730
 Shipmasters, warning to masters of vessels, customs laws violations, 7843
 Shipments :
 defense-oriented industries, 1965, current industrial reports, 13394
 preliminary, 8946
 fresh fruit and vegetables, by States, commodities, etc., 10873-874
 manufacturers', current industrial reports, 3540
 truck-air cargo transportation services (remarks), 5911
 worldwide cargo transportation costs guide, Army Dept. pamphlet, 17380
 see also Freight—also names of articles shipped.
 Shippers :
 commodity transportation survey, census 1963, shipper groups, 1855, 7473
 regional air cargo workshop (periodical), 3813
 Shipping :
 act, 1916, amend—
 hearings, 4552, 13852, 16337
 report, 15084
 act, 1916, exemptions—
 hearings, 4552
 law, 482
 cargo preference act administration, congressional sales of surplus agricultural commodities, 4551
 code of Federal regulations, 6291, 9482, 11045, 12528, 14035
 containerization (remarks), 12787
 foreign trade—
 summary report, annual, 10399
 summary reports, monthly, 3998
 United States oceanborne, 1966 review, 17909
 waterborne, summary reports, 3987, 4362, 17441
 waterborne, trade area by coastal district, monthly report, 3356
 intercoastal act, 1933, amend, hearings, 16337
 international maritime traffic, convention, report, 6065
 laws, consolidate and reenact, proposed draft, 10828
 Maritime Day observance (remarks), 11016
 maritime matters, deployment of USS Yellowstone to Malta, agreement, 15500
 maritime services, radio stations on land, shipboard, etc., FCC rules and regulations, 3274
 merchant, weather service, 7230
 military cargoes, reduced ocean freight rates by U.S. flag vessels, hearings, 4552
 ocean transport capability, container/barge quondry (paper), 12785
 operations, renegotiation, 13107
 Vietnam, policy review, hearings, 743
 see also Transportation—Water carriers.

Shipping conferences, steamship lines in foreign commerce of U.S., approved conference, rate and interconference agreements, 3037, 16376

Shipping containers, *see* Containers.

Ships:

and marine equipment, Federal Item Identification guides for supply cataloging, supplements, 3293

Coast Guard, authorization for procurement—

hearings, 7752, 10827

law, 13524

reports, 10556, 12378

Coast Guard Reserve INACDUTRA, afloat

training guide, 14878

construction, *see*, in main alphabet, Ship-

building.

dry cargo ships, results from full-scale

measurements of midship bending

stresses, report, 10076

fabrication, welding, and inspection of

machinery, piping and pressure vessels,

military standard, 2154

Federal Item Identification guides for supply

cataloging, supplements, 3293

fires, amendments to International Convention

on Safety of Life at Sea—

report, 7773

text, 6062

foreign built or rebuilt, prevent carrying

carcoes restricted to U.S. vessels, hearings,

4552

Government-owned vessels supporting military

activities in southeast Asia, financing

operations, Maritime Admin., GAO

report, 14157

international maritime traffic, facilitation,

convention, 4688

loan, agreement with—

Brazil, 15788, 15798

China, Republic of, 15790

loan, extension, agreement with—

China, Republic of, 15791

New Zealand, 15771

Peru, 2830

Philippines, 7172

loan, reduction, agreement with Japan,

17244

loans, extension, and new loan, authorize,

report, 10555

loans now in existence, authorize, extension

reports, 2025, 2101

magnetohydrodynamic propulsion, USSR

study, 14256

manning of vessels, rules and regulations,

10446

masters, grant lien on certain vessels for

wages and disbursements—

hearings, 10663

reports, 12250, 17632

merchant fleets of world, seagoing steam

and motor, 1000 gross tons and over,

16844

merchant vessels—

equipment, Coast Guard approved lists,

9002

United States, monthly supplement,

3551, 9005

military procurement appropriations,

1967, report, 2014

military procurement appropriations,

1968—

hearings, 7797, 9149

law, 12164

reports, 7786, 10570, 10575, 10611

mortgage act, fees for documents, etc.—

hearings, 4552

law, 364

report, 887

mortgage documents, surrender, transfer

authority to approve—

hearings, 6159, 10849

message from the President, 7598

naval, christening, launching, and com-

missioning, 11651

Ships—Continued

Navy ships, lithographs, 11650

noise reduction and control, USSR studies,

6498

notice to mariners, vessels navigation

safety, 3641, 7007

ocean survey, Oceanographer, OSS 01,

welcome aboard, visitor's guide, 7939

oceanographic ship operating, schedules,

7957, 17753

oceanographic vessels of the world, 8568

repairing, safety and health regulations,

9728

safety aboard ships, 5091

security, Federal regulations, 10448

shipboard equipment, dual foundation, de-

termination of fixed base neutral fre-

quencies by shake tests, 11673

shipbreaking, safety and health regula-

tions, 9729

shock mounts for shipboard equipment,

guide for selection & application, 8601

small, inland, Great Lakes and western

rivers rules, amend. law, 468

small vessels, simplify admeasurement,

hearings, 745

Soviet oceanographic ship conducts marine

research in Pacific, 14240

tropical Atlantic Ocean, Equalant III data

report, 8569

underwater ships of science, USSR, 8267

undocumented, rules and regulations for

numbering, 9007

uninsured vessels, rules and regulations,

10447

vessel repair contracts renegotiability,

revocation, 13108

wages, hours of work on board, and man-

ning of vessels, recommendations adopt-

ed at ILO convention, withdrawal of

treaty, text, 15064

wastes from watercraft, report of Interior

Dept. to Congress, 16349

print as Senate document, report, 15141

see also Fishing vessels—Hulls (ships)—

Warships—also names of ships.

Ship's servicemen, *see* Navy.

Shipyards:

earnings, straight-time hourly, indexes of

change, 3414

maritime safety digest (periodical), 3542

safety in industry, maritime safety data,

shipboard ventilation for hazardous at-

mospheres, 8299

Shirley, Lawrence E., mineral industry of

Florida, 5110

Shirley, Willifred S., relief, 604, 7643, 13785,

14902

Shirts, new plant at Gassville, Ark., rural

industrialization case study, 17711

Shiskin, Julius, X-11 variant of census meth-

od II seasonal adjustment method, 5902

Shiu, Cln Shee, relief, 9262, 13563, 16126

Shivers, James P., hovering performance

of rotor with and without blade-pitch

servo-control flaps, 5260

Shmelzer, June L., learning in action, select-

ed issues in training and demonstration

projects, 2973

Shock (mechanical):

lateral ring metal elastic wheel absorbs

shock loading, 6821

perforations in jet engine supersonic inlet

increase shock stability, 2655

shock and vibration monograph series,

17705

spiral spring/strain gage combination ac-

curately measures shock induced deflec-

tion, 1468

see also Thermal shock.

Shock mounts:

long travel, models 230, etc., rail impact

testing, 14805

shipboard equipment, guide for selection

and application, 8601

INDEX 1967

Shock tubes, circular, test times and boundary layer induced property variations, 5242

Shock waves:

- CN violet radiation behind shock waves in air contaminated with carbon-bearing compounds, analysis models, 9905
- data, compendium, 5793
- impingement effects on heat transfer on cylindrical leading edge, 6896
- methods for predicting flow in shock layer over bodies at small angles of attack, 11507
- normal wave, numerical results for diffraction by sphere and for transient flow, 17015
- prediction of shock-layer radiation from molecular band systems in proposed planetary atmospheres, 6890
- strong, in carbon dioxide, coupled vibration and dissociation relaxation, 6908

Shoes, *see* Boots and shoes.

Shook, Donald F.:

- ages of plutonium-beryllium neutrons in tungsten-water media, 1502
- resonance integrals of tungsten isotopes, 9914

Shooting, marksmanship, ROTC manual, 1766

Shop practices, *see* Machine shops.

Shops, *see* Pet shops.

Shore, Milton F., red is color of hurting, planning for children in hospital, 11758

Shore protection:

- dune stabilization with vegetation on Outer Banks, N.C., 16523
- groin design variations, 16521
- New York and New Jersey, correlation of littoral transport with wave energy, 7925, 10954
- planning and design, 1022
- stability of rubble-mound tsunami barrier, Hilo Harbor, Hawaii, 16526
- wave tests of revetment using machine-produced interlocking blocks, 16519

Shoreline, Marilyn, relief, 13624, 17499

Short, Barbara J., dynamic flight behavior of ballasted sphere at Mach numbers from 0.4 to 14.5, 8029

Short wave logarithmic antenna, USSR, 11247

Shortened horn-reflector antenna, 8452

Shortleaf pine, *see* Pine.

Shot peening, glass bead, retards stress corrosion failure of titanium tanks, 14113

Shoulder, restraint installation in general aviation aircraft, recommendations, 7446

Shreveport, La., population, special census, 4354

Shrews, subfamilies and genera of Soricidae, classification, zoogeography and temporal correlation, 14173

Shride, Andrew F., younger Precambrian geology in southern Arizona, 16696

Shrimps:

- breaded—
- annual summary, 9511
- current fishery statistics, 3336
- Gulf Coast, data, 3386
- landings, 3876, 16610

Shrine, Mystic, *see* Ancient Arabic Order of Nobles of Mystic Shrine.

Shrout, Barrett L., aerodynamic characteristics at Mach 2.03 of series of curved-leading-edge wings employing various degrees of twist and camber, 6874

Shrub live oak, *see* Oak.

Shrubs, seed and planting stock, commercial dealers, directory, 8125

Shuford, Emir H., jr., cybernetic testing, 8864

Shugars, Owen K.:

- costs and returns, commercial—
- egg-producing farms, New Jersey, 16489
- tobacco farm, Coastal Plain, North Carolina, 15943

Shugars, Owen K.—Continued

- costs and returns, commercial—continued
- tobacco-livestock farms, Bluegrass area and Pennyroyal area, Ky.-Tenn., 16490

Shulman, Stephen N., nomination, hearing, 9327

Shultz, Janet L., mass spectrometric analyses of coal-tar distillates and residues, 14354

Shultz, John F.:

- kinetics of gas synthesis using recycle systems, 9790
- noble metals, molybdenum, and tungsten in hydrocarbon synthesis, 12827

Shutters, color-coded sleeve, use to accelerate oscillograph channel selection, 17991

Sibbald, David M. H., MAC flyer, 3531

Siberia:

- central, Bratsk and Krasnolarsk hydroelectric projects, bibliography, 8665
- east coast, sailing directions, change, 14577
- eastern, new Soviet academic settlement in Irkutsk, 9637
- scientific labor organization proves effective at Siberian mining institute, 4263
- southeast coast, sailing directions, change, 11640

Sick:

- acute conditions, incidence and associated disability, 14637
- chronic illness among residents of nursing and personal care homes, May-June 1964, U.S. statistics, 11764
- chronically ill—
- charges for care in institutions, 17169
- dental care, 13089
- duration of illness, medical service data, Air Force pamphlet, 8858
- financial protection for Federal employees, 1925
- health interview survey, standardized morbidity ratios for measures of illness by family size, etc., 7097
- income-loss protection against short-term sickness, 2866
- prevalence of chronic conditions and impairments among residents of nursing and personal care homes, 14639
- publications, price list, 2801
- smoking and illness, effects of tobacco, etc., 13094, 18186
- transportation of sick and wounded, Army field manual, 100

Sick leave, *see* Leave of absence.

Sidewalks:

- emergency construction at military installations, general provisions and geometric designs, 5742
- flexible pavement design, emergency construction, Army technical manual, 10277

Siding, asphalt and tar, current industrial reports, 3169, 5854

Sidoraky, Raymond C., research on generalized skills related to tactical decision making, 9982

Sieder, Violet M., rehabilitation agency and community work, source book for professional training, 7222

Siegel, Jacob S., revised projections of school and college enrollment in United States, 10363

Siegel, William C., forest tax trends in Louisiana, 8099

Sielski, Matthew C., remarks, Mar. 29, 1967, 7567

Sierra, Teresa, remarks, Apr. 27, 1967, 11700

Sierra Leone:

- foreign trade regulations, 12135
- judicial procedure agreement, 7156
- labor conditions, 2513
- mineral industry, minerals yearbook chapter, 2564

Sierra Nevada:

- Cenozoic volcanic rocks, 14170
- Desolation primitive area, mineral resources, 11169
- Mono Craters quadrangle, structure and metamorphism, 4887

Sight:

- aircrew station vision requirements for military aircraft, military standards, 16470
- color defective vision, diagnostic tests, bibliography, 17411
- depth perception, problems, 138-139
- eye research, NINDB, 8631
- flashblindness experiment in F-4C flight simulator, 1738
- night vision, oxygen breathing effects, 11347
- peripheral vision displays, 12865
- underwater visual resolution, 14317
- see also Color perception—Optical illusion.

- Sigman, Donald R., ion cyclotron wave generation in uniform and nonuniform plasma including electron inertia effects, 12962

- Sign language, voice of the silent stage, 4723

- Signal construction battalion, field manual, 4205

- Signal generators, electronic test instrument generates extremely small current signals, 17923

- Signal lights, see Lights and lighting.

- Signal processors, employing synthetic phase isolator, study, 11397

- Signal systems, Federal item identification guides for supply cataloging, supplements, 3289

- Signalmen, 1 & C, Navy training course, 15634

Signals:

- aircrew station signals, military standard, 17700

- auditory vigilance as affected by signal rate and intersignal interval variability, 11346

- generator converts direct current to multiphase supplies, 17979

- infrared frequency devices and correlation function measurement, USSR study, 9647

- instrument automatically selects peak acceleration signal from several accelerometers, 1459

- instrument sequentially samples ac signals from several accelerometers, 8461

- local measurements in turbulent flows through cross correlation of optical signals, 8462

- microminiature dc signal-conditioning amplifier, development, 14483

- MOFSET analog memory circuit achieves long duration signal storage, 6766

- patent classification definitions, 17105

- patterning, effects upon vigilance performance and physiological responses, 8585

- presentation rate, auditory threshold and group vigilance, 11349

- probability distribution, 1st and 2d order, measuring system devised, 17085

- signal large headquarters, operation company, Army field manual, 15937

- single-sideband modulator accurately reproduces phase information, 1446

- solid-state circuit averages multiple signals and rejects those varying significantly from the average, 15492

- video, high-speed, single-shot transient, recording and time expansion technique, 11468

- vigilance performance and physiological responses under fixed and variable schedules, 14590

- visual, Army field manual, 5727

- see also Radio signals—Television.

Signs (advertising):

- compensation by States for removal under highway beautification act of 1965, opinion of Attorney General, 8279

- Silazane elastomer remains resilient at 400° C, 6825

- Silen, Roy R., simple, progressive tree improvement program for Douglas-fir, 8081

Silica:

- isolation of components on silicon wafer using SiO_2 , 1423

- lead-silica glass, viscosity of standard type, 1520

- natural phases of system $\text{MgO-SiO}_2\text{-H}_2\text{O}$ and systems containing congeners of magnesium (series), 8160

- pyrogenic, study of thixotropic suspensions, 11679

- reactions with manganese, 6684

Silicates:

- far infrared spectra of silicate minerals, study, 9841

- interface between ice and silicate surfaces, 11982

- lithium-aluminum silicates, thermodynamic properties, 14355

- potassium- and lithium-aluminum, heats of formation, 2577

Silicon:

- diffusion of impurities into silicon from gaseous sources, 1421

- electron transmission through thick silicon targets, 11498

- energy required to produce electron-hole pair in silicon by tritons, 1501

- high-purity single-crystal, proton bombardment, 11534

- integrated circuits, improving contact bonds, 16965

- minerals yearbook chapter, 1415

- planar silicon devices, thermal and bias cycling stabilizes, 12902

- Si-Fe sheet gage chemically reduced, 2624

- SIC/Si diode trigger circuit provides automatic range switching for log amplifier, 17957

- solar cells, introducing selected impurities, process for controlling, 16949

- targets, thick, bombarded with 1.05 and 1.25 million volts electrons, X-ray spectra produced, 2683

- wafer using SiO_2 isolation of components, 1423

Silicon carbide:

- crystals, process facilitates photoresist mask alignment, 11473

- SIC/Si diode trigger circuit provides automatic range switching for log amplifier, 17957

- Silicon dioxide, see Silica.

- Silicon tetrafluoride, separation of HF from $\text{HF-SiF}_4\text{-H}_2\text{O}$ mixtures, 2581

- Silk screen printing, equipment panels, eliminated with Mylar film, 1454

- Silos, farm, 5656

- Siloxanes, polydimethylsiloxane monolayers, surface viscosity, 8592

- Silsby, Norman S., simulator study of pleterial navigation display in instrument departures of supersonic transport, 12944

- Silurian period, Upper Silurian stratigraphy of northeastern Pennsylvania, New Jersey, and southeasternmost New York, 11167

Silver:

- distribution—

- Cripple Creek district, Colo., 9571

- Ely mining district, White Pine County, Nev., 9564

- in magnesium-base alloys, determination, 9985

- mineral industry survey, monthly report, 3877

- minerals yearbook chapter, 2589

- palladium braze alloy recovered from masking materials, 6793

INDEX 1967

Silver—Continued

- production and consumption, 1964, report, 8381
- silver-base ternary alloy proves superior for slip ring lead wires, 5212
- solid palladium-silver alloys, thermodynamic properties, investigation by torsion-effusion technique, 17924
- substituting gold for silver improves electrical connections, 15528
- transfer by Treasury to national stockpile—
 - law, 12171
 - reports, 10602, 10765, 12248
- United States movements—
 - annual, 12093
 - monthly, 3993
- Silver (money) :
 - Mint Bureau, report, 8361
- Silver Bay (fishing vessel) :
 - exploratory collection made in southwestern North Atlantic, 1956-60, correction, 8035
- Silver certificates :
 - redemption—
 - hearings, 9151, 10819
 - law, 12171
 - reports, 10602, 10765, 12248
- Silver oxide, electrode, changing discharge capacity by charging with interrupted current, 9098
- Silver plating :
 - blistering, undercoat prevents at elevated temperatures, 11444
 - ensures reliable diffusion bonding of dissimilar metals, 11461
 - technique seals leaks in thin wall tubing joints, 6699
- Silvey, William D., occurrence of selected minor elements in waters of California, 11186
- Silviculture, *see* Forests and forestry.
- Sim, Mary S., hospital laundry, 7071
- Simians :
 - vacuolating agents, SV 40 virus, Polish study, 9653
 - viruses, Rumanian studies, 6529
- Simmonds, F. A. :
 - determining scattering and absorption coefficients by diffuse illumination, 11114
 - review of methods for estimating harmful pitch in woodpulp, 11112
- Simmons, George C., Otter Creek coral bed and its fauna, east-central Kentucky, 6394
- Simmons, Joseph H., ultrasonic attenuation in superconducting niobium, 5273
- Simon, A. C., micrography of tubular battery plates, 8591
- Simon, Armando Teodoro Perez y, *see* Perez, Armando, S.
- Simon, Kenneth A., digest of educational statistics, 2180
- Simons, E. M., reactor materials, quarterly technical progress review, 3807
- Simonson, Marvin R., high gas temperature utilization for advanced tip turbine fans, 4221
- Simple motor drive system operates heavy hinged door, 8404
- Simple technique determines ac properties of hard superconductive materials, 6817
- Simplified clothing instruction, 14743
- Simplified fixture permits precision alignment of optical target, 2670
- Simplified practice recommendations, 1524, 6920
- Simpson, Fred H., small gas turbine engine component technology, etc., 10287
- Simpson, John R., rotor system for hot cycle heavy-lift helicopter, 10288
- Simpson, Milward L., tributes upon retirement as Senator, 2078
- Sims, P. K., petrology and structure of Precambrian rocks, Central City quadrangle, Colo., 12611

Simulation :

- analog computer, application of stereoscopic display system, 6757
- applied mathematics, computers, and information models, USSR study, 10735
- calibrations, liquid hydrogen turbine-type flowmeter using high-pressure gas, 5251
- computer, plasma and many-body problems, symposium, 16928
- equivalent circuit for field effect transistor established for computer simulation, 6844
- gaseous core nuclear rocket mixing characteristics using cold and arc heated flows, 12848
- Gemini-Agena docking, pilot controlled, full-size visual cues, 1495
- IPR conditions, exposure of men to intermittent photic stimulation, 5802
- in biology and medicine, USSR study, 15356
- lunar module docking with Apollo command module in lunar orbit, 11520
- olfactory sense and its modeling, USSR studies, 1326
- passive analog, use for study of square plates, 5168
- pilot-controlled docking of Apollo command and service module with lunar module, 2689
- plotted study of manual guidance of upper stages of large launch vehicle, 9887
- satellite telemetry data program, generalized, 1508
- sensitivity experiments, computer program, 11439
- static calibration of ejector unit for stimulation of jet engines in small-scale wind-tunnel models, 6899
- transient analysis generator simulates behavior of electrical networks, 16954
- Simulators :
 - antenna, preinstallation system checkout, 2648
 - general purpose airborne simulator, 5161
 - nuclear reactor simulator for nonnuclear testing of space power systems, 14487
 - phonocardiogram, for physiological monitoring, 14434
 - real-time training, digital computation systems, military standard, 9373
 - space cabin, contaminants produced by man, 11955
 - star/horizon, use to test space guidance system, 11447
 - X-ray machine, 18191
 - see also* Flight simulators—Space simulators.
- Simulations of war, Army logistics, 1397
- Singapore :
 - background notes, 15762
 - capsule facts for Armed Forces, 15911
 - economy, basic data, 7575
 - mineral industry, minerals yearbook chapter, 6658
 - trade in cotton textiles, agreement, 2934
- Singer, Joseph M. :
 - equivalences and lower ignition limits of coal dust and methane mixtures, 9782
 - flame characteristics causing air pollution, production of oxides of nitrogen and carbon monoxide, 8378
 - reduction of incendivity of hot gases, etc., 11353
- Singh, Jag J. :
 - electron transmission through thick silicon targets, 11498
 - X-ray spectra produced when thick silicon targets are bombarded with 1.05 and 1.25 million volts electrons, 2683
- Single Convention on Narcotic Drugs, 1961, *see* Narcotics.
- Single-sideband modulator accurately reproduces phase information in 2-Mc signals, 1446

- Single-span running skylines, 14102
- Singleterry, Curtis R., movement of oil in miniature ball bearings, 17089
- Slankiang Province, China, nature, and formation of deserts, study, 6585
- Slinnhuber, R. O., effect of irradiation on microbial flora surviving irradiation pasteurization of seafoods, 1800
- Sino-Soviet conflict, print additional copies, report, 2029
- Sintering:
nephelitic charges, USSR study, 9645
process in snow, 10257
snow, role in construction, 15930
see also Lime-soda sintering.
- Sinus Iridum, LAC 24, lunar chart, 7320
- Sinusitis, allergy and sinus disease in aviators, 14782
- Sioux Falls, S. Dak., area wage survey, 5065
- Siple, George E., geology and ground water of Savannah River plant and vicinity, S.C., 16705
- Sires, *see* Bulls.
- Sirken, Monroe G., utilization of short stay hospitals, 17170
- Sirups, refiners', U.S. standards for grades, 15178
see also Maple sirup.
- Sisco, Joseph J., address, Nov. 12, 1966, 5530
- Sister Grove Creek Watershed, dedication of Texas' 1000th watershed project dam (address), 22
- Site indexes:
Delaware-Maryland sweetgum stands in relation to soil characteristics, 4832
Douglas-fir, site curves, comparison, 2309
lodgopole pine, with corrections for stand density—
instructions for field use, 2333
methodology, 14145
table for aspen in southern and central Rocky Mountains, 2310
- Sites:
acquisition and developing, for educational facilities, guide to Federal financial assistance programs, 10931
site clearing, safety in industry, instructor outline, 17887
use of water-meter records to estimate use on developed sites, 12579
- 6 steps forward, 17186
- Skagerrak, northern and eastern, sailing directions, change, 13023
- Skagit River:
engineer report—
departmental edition, 4739
document edition, 4466
- Skeletons, early skeletons from Tranquility, Calif., 1531
- Skilling, *see* Skis and Sking.
- Skilled workers, *see* Labor.
- Skin:
cancer, 2816
cutaneous bacteriologic evaluation, man in oxygen-helium atmosphere, 84
surface, use of infrared absorption spectroscopy for representation of lipids, Yugoslavian study, 12667
test for schistosomiasis in Puerto Rico, survey for prevalence, 8654
- Skin flora:
diet and atmosphere effect—
experimental data, 9799
literature survey, 2613
- Skin friction (aircraft):
surbulent boundary layer—
periodic blowing through flush transverse slots on, effects, 1431
swept wings, wake momentum surveys measurement, 2725
turbulent, charts adapted from Spalding and Chi method, 11518
- Skin-friction gages, flight demonstration to Mach number of 4.9, 6877
- Skinner, Snider W., Senegal's agricultural economy in brief, 992
- Skirts, changing the hem, 7283
- Skirvin, Frederic A., purification of tungsten hexachloride, 14341
- Skis and skiling:
national forests, America's playgrounds, 5667
national forests of Intermountain region, Americas winter playgrounds, 6372
trends and opportunities in Western States, 11133
- Skokie, Ill., population, special census, 16025
- Skolnik, Alfred M., workmen's compensation payments and costs, 2867
- Skouson, Glenn W., isolation of components on silicon wafer using SiO₂, 1423
- Skovlin, Jon M., fluctuations in forage quality on summer range in Blue Mountains, 16663
- Skull:
avian skull, kinesiol, role of depressor mandibulae muscle, 11610
miniature piezoelectric triaxial accelerometer measures cranial accelerations, 2659
- Skyline Churches Cemetery, land conveyance to, 288
- Skyline tension and deflection handbook, 12584
- Slabs:
reinforced concrete, influence of reinforcing details on yield line pattern and ultimate load-carrying capacity, 17736
slotted, transient radiation and conduction, 17941
- Slack, Eileen S., aluminum industry in Japan, 9015
- Slack, Keith V., Birch Creek, travertine depositing stream, Inyo County, Calif., 8171
- Slade, Grant E., chemicals, quarterly industry reports, 3092
- Slag:
blast-furnace and synthetic, heat content, 6675
iron-blast-furnace, minerals yearbook chapter, 2590
- Slagle, Franklin D., densities and porosities of core samples from wells in Appalachian oilfields, 11353
- Slash, *see* Forests and forestry.
- Slash pine, *see* Pine.
- Slate, blackboard, standard sizes, standards of trade, 5285
- Slattery, J. C.:
ionization probability of iron particles at meteoric velocities, 11406
observation of micrometeorite craters in metal substrates utilizing micrographic replica methods, 9815
- Slaughtering:
beef on farm, 4106
commercial slaughter, meat and lard production, etc., 11879
lamb and mutton on farm, 1690
livestock, monthly report, 3519
pork on farm, 8829
- Slavery:
supplementary slavery convention—
hearings, 7806, 16410
report, 17619
- Sleep:
deprivation, prolonged stage 4 and 1-REM, comparison of effects, 15900
human memory during natural sleep, input and consolidation of information, USSR book excerpts, 15362
natural, information input and fixation in human memory during, USSR study, 11285
- Sleeping Bear Dunes National Lakeshore, establish, report, 636
- Sleeves (industrial):
pipe joints reinforced in place with fitted aluminum sleeves, 15541, 17954
- Slemon, David R., relief, 346

INDEX 1967

Slide rules, slide rule-type color chart predicts reproduced photo tones, 11436
 Slidefilms, see Film slides.
 Slides (glass):
 microscope slide loader for thin-layer chromatography, 13272
 Sliding of non-temperate glaciers, 7379
 Slip laws, see Law.
 Slip rings, see Electric slip rings.
 Slip tables, shaker system, air bearing provides friction-free support, 8402
 Slippers, see Boots and shoes.
 Slocum, Walter L., aspirations and expectations, guide to research, 17710
 Slopes:
 formation and stability on cohesionless materials, Plowshares program, 17398
 measurement of peak discharge of streams by slope-area methods, techniques, 11185
 Sloshing:
 dynamics study in near zero gravity, vehicle and spacecraft description, 11530
 fuel, baffle thickness effects, 2700
 liquid, in elastic containers, 16906
 Sluchevskiy, I. F., biography, 2480
 Slums:
 causes, difficulties, and possible solutions to problems of ghetto (remarks), 17841
 clearance—
 local public agency letters, 3523
 urban renewal manual, 4009
 demonstration cities and metropolitan development act of 1966—
 law, 465
 law, summary, section-by-section analysis, legislative history, and conference report, 725
 Slurries, dewatering anthracite slurry, 15478
 SM series, 1905, 7528, 13427-432, 14846, 16056-57
 SM-1A reactor, see Reactors (atomic).
 Small, James B., horizontal and vertical crustal movement in Price William Sound, Alaska, 5940
 Small-area data activities, 3878
 Small arms, see Firearms.
 Small Boy project 62.80b aeroradioactivity survey, 12001
 Small business, see Business.
 Small Business Administration:
 administrator, nomination of Robert C. Mott, hearing, 13848
 appropriations, 1967, law, 501
 appropriations, 1968—
 hearings, 10632, 16390
 reports, 10616, 16372
 authorizing legislation, amend—
 hearings, 10820, 15020
 law, 17549
 reports, 12391, 14961, 14982, 16261
 business loans, lending objectives, etc., 2555, 13117
 economic injury disaster loans, etc., for displaced small businesses, 14643
 economic opportunity loan programs, 13114
 examination function of small business investment company program, GAO review, 16675
 financial assistance programs, review, 16439
 local development company loans, 8678
 economic growth at community level, 1599
 meeting with officials, hearings, 9150
 Minneapolis, Minn., office, salvage of fire and water damaged records, 14165
 organization and operation—
 hearings, 2060
 report, 4508
 organization, changes—
 law, 453
 report, 4588
 participation loans with SBA, guide for private lending institutions, handbook, 5490

Small Business Administration—Continued
 press releases, 3760
 programs for progress, 7111
 publications—
 for sale booklets, 5491
 free management assistance publications, list, 5492, 18202
 management aids for small manufacturers, 2854
 role, present and future, hearings, 2060
 self-improvement-community style, 502
 loan program, 11789
 small business investment program, 1966—
 hearings, 2062
 report, 4509
 starting and managing series, 5497, 8679, 15733
 Small Business Crime Protection Insurance Corporation, establish, hearings, 17644
 Small Business, Select Committee on, House:
 committee prints, 4561-62, 10679
 final report for 89th Congress, 6002
 hearings, 2060-62, 10678, 12317
 investigations and studies—
 authorization, report, 4518
 expenses, report, 7679
 reports, 668, 4508-14, 6002
 Small Business, Select Committee on, Senate:
 annual report, 10795
 committee prints, 4660, 9330, 16437, 16439
 hearings, 12428, 16436, 16438, 16440, 17677-679
 investigations and studies, small and independent business, problems, authorization, report, 4610
 publications, list, 4660
 reports, 10794-795, 16365
 Small craft, gale and whole gale warning facilities charts, 14723-724
 Small Magellanic Cloud, see Magellanic Clouds.
 Smallpox, health information series, 18165
 Smedes, Harry W., geology and igneous petrology of northern Elkhorn Mountains, Jefferson and Broadwater Counties, Mont., 2367
 Smell, olfactory sense and its simulation by modeling, USSR studies, 1326
 Smelting:
 electric, of complex lead-zinc sinter, 14353
 electrorefining—
 titanium-nitrogen alloys, 2582
 yttrium, 15482
 molten-salt electrorefining vanadium scrap, 17916
 Smith, Alan A., technology and your new products, 13118
 Smith, Albert C., new and noteworthy flowering plants from Fiji, 12997
 Smith, Bryce A., relief, 7615
 Smith, Charles C., Jr., flight characteristics of model of aspect-ratio-6 conical-parawing utility vehicle, 5229
 Smith, Charles R., pulp, paper, and board, quarterly industry report, 3788
 Smith, Clarence T., Army research and development, newsmagazine, 3043
 Smith, Dwight R., effects of cattle grazing on ponderosa pine-bunchgrass range in Colorado, 14764
 Smith, Floyd F., controlling insects on flowers, 17307
 Smith, G. Louis, equations for rapid machine computation of equilibrium composition of air, etc., 16973
 Smith, Gerald L., theory and methods of statistical inference, 8507
 Smith, Guy F., international education act of 1966, summary, 8191
 Smith, H. Clay:
 epicormic branching on 8 species of Appalachian hardwoods, 8078
 visible dormant buds as related to tree diameter and log position, 17802

Smith,
tigu
and
Smith,
Viet
Smith
unit
Smith
bine
Smith
from
258
Smith
bas
est
Smith
Ho
hy
Smith
Smith
93
Smith
err
80
Smith
spi
Smith
Smith
Co
Smith
me
mo
Smith
iso
ec
Smith
Smith
up
Smith
fa
Jo
V
Smith
6
Smith
pe
1
Smith
a
Smith
d
1
Smith
8
Smith
1
Smith
2
Smith
Sm

Smith, H.H., high temperature vacuum fatigue testing of type 316 stainless steel and Inconel X, etc., 11676

Smith, Harvey H., area handbook for South Vietnam, 18297

Smith, Irwin D., nitrogen tetroxide disposal unit combustion products 11515

Smith, Jack, Mines Bureau coal-fired gas turbine research project, 9772

Smith, John W., shale oil specific gravity from Colorado's Green River formation, 2587

Smith, Maureen R.:
basic data on economy of Ethiopia, 7580
establishing business in Ethiopia, 13465

Smith, P. M., outlet works and stilling basin, Howard Hanson Dam, Green River, Wash., hydraulic model investigation, 2201

Smith, R. H., black turpentine beetle, 16646

Smith, Richard B., nomination, hearing, 9307

Smith, Richard H., forcing attacks of western pin beetles to test resistance of pines, 8083

Smith, Richard M., analysis and design of space vehicle flight control systems, 12875

Smith, Robert G., relief, 848

Smith, Robert V., soil survey of Montgomery County, Pa., 11807

Smith, Ronald C., heat-transfer measurements on rotor blades of rotor entry vehicle model, 12965

Smith, Sheldon M., coronal photographs, isophotes, and flash spectrum from solar eclipse, 11551

Smith, T. Michael, relief, 13578

Smith, W. S., temperature, pressure, etc., upper stratosphere and mesosphere, 17012

Smith, Wesley G., movement of labor between farm and nonfarm sectors and multiple jobholding by farm operators in Tennessee Valley, 17262

Smith, Willard J., nomination, hearings, 6094

Smith, Winchell, acoustic velocity meter, report on system development and testing, 14167

Smith River and Valley, basin, magnitude and frequency of floods, 14177

Smithrick, John J., energy required to produce electron-hole pair in silicon by tritons, 1501

Smithsonian Astrophysical Observatory, research opportunities, 1601

Smithsonian contributions to anthropology, 1531, 6972-74, 9954, 13001, 144547

Smithsonian contributions to astrophysics, 2859, 8683, 18204

Smithsonian identification manual, 2752

Smithsonian Institution:
annual report, 1966—
departmental edition, 7114
document edition, 5980

appropriations, 1968—
hearings, 7734, 9302
law, 12170
reports, 10560, 10766, 12252

citizen regent of board of regents, reappointment of Jerome C. Hunsaker—
law, 12169
reports, 10605, 10741

collections, portunid crabs from Pacific and Indian Oceans, 8540

Dürer and his time, exhibition from collection of Print Room, State Museum, Berlin catalogue and notes, 10079

general information, 15735

History and Technology Museum, growth of United States, 1640-1851, exhibition, 18203

Joseph H. Hirshhorn Museum and Sculpture Garden, establish—
law, 492
reports, 883, 896, 4506

Smithsonian Institution—Continued
National Museum act of 1966—
law, 392
report, 681

National Zoological Park, administration, reorganization—
hearing, 736
report, 2021

publications, price list, 15671

rates of compensation for certain executive positions, establish, law, 447

research opportunities, 2860

Smithsonian torch (periodical), 8684

Smithsonian journal of history, 3879

Smithsonian miscellaneous collection, 5500, 11790-791

Smithsonian torch (periodical), 8684

Smoke:
evaluation of smoke-wire technique for measuring velocities in air, 10293
hood, to protect passenger, aviation, medical report, 14812

Ringelmann chart for grading density, 11354

smoke operations, Army field manual, 10260

Smoke generators, chemical smoke generator units, Army field manual, 10260

Smoked fish, see Fish and fisheries.

Smoking:
and health—
bibliography, 15705
directory of on-going research, 11743
and illness, effects of tobacco, etc., 13094, 13186

cigarette smoking—
and health characteristics, statistics, 10067
chronic bronchitis and emphysema, 5424
health consequences, Public Health Service review, 17144

library services of National Clearinghouse for Smoking and Health, 11740

light on subject of smoking, 4366

National Interagency Conference on Smoking and Health, highlights, 7077

Snake River and Valley:
fish passage report, 13974

Lower Monumental Dam, spillway and stilling basin, hydraulic model investigation, 10949

upper dryfarming area, moisture conservation for wheat production, 4088, 11923

SNAP (systems for nuclear auxiliary power), see Atomic auxiliary power generators.

Snapper, western Atlantic, field guide, 8019

Snee, Joseph M., international law studies, 11683

Snell Lock, St. Lawrence Seaway, investigation of concrete, 13987

Snipes:
hunting, possession, transportation, importation, 1967-68, Federal regulations, 16623
Alaska, 14061

Snoberger, D., vent-gas treatment plant, 1809

Snow:
accumulation on open mesh metal panels, prevention, 8579
alpine, Montana, mechanical properties, 13292
alpine snow covers, densification, 15933
bibliography, with abstracts, 14791
conditions, weather and crop bulletin (periodical), 4060
construction, sintering role, 15930
creep of snow and ice, research report, 7378
damage to coniferous seedlings and saplings, 1091
depth probability calculations, Great Lakes, charts and tables, 12776
Federal-State-private cooperative surveys—
Arizona, 4044

INDEX 1967

Snow—Continued

- Federal-State-private cooperative surveys—Continued
 - Colorado—
 - early season report, 5519
 - special snow report, 15750
 - Colorado and New Mexico, 4045
 - Idaho, 4046
 - Montana, 4047, 18217
 - Nevada, 4048, 17205
 - Oregon, 4049
 - Utah, 4050
 - Washington State, 4051
 - Western United States, including Columbia River drainage in Canada, 4052
- Greenland firn, artificial radioactivity reference horizons, 4197
- hardness, Rammsonde equation, reevaluation, 1755
- heat conduction in moist porous media, 10256
- sintering process, 10257
- snow cover and calculation of snow floods in forest— and steppe regions, USSR study, 1203
- structures, effect of explosions, 99
- surface, mass transfer by sublimation, investigation, 4198
- surveying method, basis, USSR study, 1183
- surveys, Alaska, 3317
- transport of intercepted snow from trees during snow storms, 8114
- see also Precipitation.
- Snowstorms, transport of intercepted snow from trees, 8114
- Snyder, Irene, relief, 545
- Snyder, Thomas E., control of nonsubterranean termites, 7270, 8826
- So . . . you want to be (series), 15205-207
- Soap :
 - cation effect on solubilization by oil-soluble sulfonates and applicability of mass law, 17095
 - floating white, Federal standard, cancellation, 11062
 - grit, hand, paste, and powder, Federal standard, cancellation, 11064
 - toilet, liquid and paste, Federal standard, cancellation, 9498
- Socarraz, Oton, relief, 9192, 12233, 13486
- Social and Rehabilitation Service, nursing home care provided to welfare recipients, guidance to States in establishing rates, GAO report, 17811
- Social interaction, see Behavior.
- Social life and customs, see Manners and customs.
- Social progress program, Inter-American, see Latin America.
- Social sciences :
 - research, International, Federal support, hearings, 10842
 - use of social research in Federal domestic programs—
 - current issues in administration of Federal research, 9161
 - federally financed research, adequacy, etc., 9161
 - federally financed research, expenditures, etc., 9161
 - private social scientists, relation to Federal programs on national problems, 9161
 - Vientiane Plain, socio-economic study, 6578
- Social scientists, use, relation to Federal programs on national problems, 9161
- Social security :
 - account numbers, 1966; issuances, 18208
 - act, amend—
 - hearings, 7763, 10684
 - laws, 13523, 16142
 - reports, 697, 16264
 - amendments of 1965, mental health benefits, 5447

Social security—Continued

- amendments of 1967—
 - analysis and explanation, 6048, 16346
 - hearings, 15154, 16409
 - reports, 14953, 14964
 - summary, 15053
- benefits—
 - and poverty, status of low-income beneficiaries or aged persons, 7132
 - disability, rights and responsibilities of recipients, 11800
 - income limitations under VA pension programs, hearings on miscellaneous bills, 17613
 - outside United States, 14646
 - overpayments, GAO review, 8142
 - special, awarded to persons aged 72 years and older during last quarter of 1966, brief explanation, 10086
 - students 18-22, cash, 5512
 - your duties as representative payee, 15744, 18211
- bulletin, 3880
- statistical supplement, 13121
- career for you in social security, 14645
- clergyman, explanation, 11801
- coverage for household employees, 11795
- coverage for household workers, 7122
- disability applicant statistics, disabled workers, etc., 8691
- District of Columbia participation in medical assistance program—
 - hearings, 10645
 - report, 13645
- economic effects of seasonality in OASDHI tax payments, 17203
- establishment reporting plan, statement for use of employer, 1604
- farmers, self-employed—
 - are you getting your social security credit, 2863, 18210
 - reporting income, special information, 1605
- Federal employment, transfer of retirement credits, to close gaps in protection, amend U.S. Code, hearings, 10672
- financing your benefits, 7123
- general information, 14647
- handbook, 1606
- health insurance—
 - enrollment, July 1, 1966, number of persons by State and county, 10083
 - extended care facilities, directory, 15738
 - home health agencies, directory, 11793
 - hospitals, directory, 11794
- help or information, list of social security district offices, 5507
- household worker statistics, 2871
- how it helps us, hi, I'm Mr. Money Wise, 14649
- income maintenance, retirement, survivors, and disability insurance, health insurance for people 65 and over, hospital insurance, medical insurance, information, 10085
- increase benefits, message from the President, 12198
- increases, reduction of retirement benefits—
 - hearings, 10798
 - report, 15144
- information for crew leaders and farmers, 15741
- information for young families, 15742
- Joe Wheeler finds a job and learns about social security, 14647
- answer sheet, 14648
- law, changes, 5506
- nonprofit organizations and their employees, how it works, 5505
- outline for studying, 5508
- programs throughout world, 8692
- publications, price list, 17135
- railroad retirement beneficiaries who receive social security payments, message about medicare, 15739

Social security—Continued

- reform of French social security system, 17199
- research and statistics notes, 1607, 2866-67, 5514-16, 7129-32, 8689-90, 10086, 11798-799, 17198-202, 18208
- index, 7121
- retirement or survivor benefits, rights and responsibilities of recipients, 7133
- rulings on Federal old-age, survivors, disability, and health insurance, 2872, 3881
- school certification of full-time attendance for social security purposes, 15743
- self-employed people, reporting their income, special information, 2661
- self-employment taxes, guide for farmers, 1967 edition, 1142
- special information for people who receive cash tips, 17204
- special payments—
 - people 72 or over, brief explanation, 2873
 - rights and responsibilities of those who receive, 15740
- survey of the aged population of U.S., 13120
- Sweden's system, 1608
- tax guide for—
 - employers in Virgin Islands, Guam, and American Samoa, 2402
 - household employers, 2401
- teaching aids, free, 7124
- widows with children, survey, 2869
- your social security, 5506
- see also* Disability insurance—Old-age, survivors, and disability insurance.
- Social Security Administration:**
 - actuarial notes, 1603, 5501, 7115-17, 11792, 14644, 15736
 - actuarial study series, 7118, 8686, 10082
 - data processing (lectures), 15737
 - social security benefit overpayments, GAO review, 8142
 - SSI series, 11801, 14647-649, 15741-742, 17204, 18209-210
 - TIB series, 15743
- Social service, *see* Social work and problems.**
- Social surveys:**
 - Atlantida, case study in household sample surveys—
 - content and design of household surveys, Spanish edition, 5898
 - distribution and receipt of materials, 1885
 - editing and coding, 4360
 - field operations, instruction manuals, 182
 - population data controls, Spanish edition, 5899
 - survey objectives and description of country, Spanish edition, 7496
 - tabulation process, 7497
 - workbook for case study, 10387
- Social usage abroad, guide for American officials and their families, 8712**
- Social work and problems:**
 - careers in social work, examination announcement, 5928
 - cities in crisis, the challenge of change, 10133
 - community planning for health, education, and welfare, bibliography, 16540
 - community services in low-income neighborhoods, field guide to concerted services, report of joint task force, 17840
 - development of border area, joint commission to study, agreement with, Mexico, 7191
 - effects of marketing (remarks), 242, 1960
 - health, education, and welfare indicators (periodical), 3394
 - low and moderate income groups, new welfare programs, 8193

Social work and problems—Continued

- major social problems, adequacy and usefulness of federally financed research, 9161
- neighborhood service centers, services offered, problems, etc., 5595
- optimum social welfare through planning, participation, and manpower, 8194
- research relating to children, studies in progress, 8907
- scientific research, factors contributing to increased effectiveness, USSR study, 1206
- social development, role of cooperatives, ILO recommendation, text, 13554
- social services—
 - Federal assistance program, 12447
 - statistical reports, 6234, 7942, 13998
- use of social research in Federal domestic programs, private social scientists, relation to Federal programs on national problems, 9161
- voluntary welfare agencies, fund-raising within Federal service, manual, 3539, 4399
- welfare councils, role in community health planning, 2832
- welfare programs and services, facts, 7234
- welfare, reference facts, 16706
- Social workers:**
 - examination announcements, 1907, 5928
 - intake and case recording, fact-finding report, Santa Clara County Welfare Department, San Jose, Calif., 10973
 - public welfare personnel, 1965 statistics, 12483
 - Veterans Administration hospitals and clinics, nationwide, career information, 14711
- Socialism:**
 - hydrometeorological and meteorological services of socialist countries of Europe, conference of directors, USSR study, 1179
 - political organization of socialist society, USSR studies, 14269
 - scientific research coordination in agriculture and forestry in Socialist countries, 7th conference, Hungary, 14242
 - setting up Socialist brigades for technical progress, new regulations announced, Bulgaria, 12668
 - Socialist Turkey, treatise, 5027
 - Socialist Federal Republic of Yugoslavia, *see* Yugoslavia.
 - Societies, *see* Scientific societies.
 - Society, cybernation and social change, seminar, 6596
- Socioeconomics, socioeconomic status, census of population, 14835**
- Sociology:**
 - Communist China, translations, 3951
 - development digest (periodical), 3202
 - Eastern Europe, translations, 3882
 - future international meetings, world list, 4074
 - philosophical development of theories, USSR study, 5024
 - quantitative methods, USSR study, 12678
 - rural poor, aspirations and expectations, guide to research, 17710
 - sociological problems of development of science and technology, USSR review of new literature, 16787
- Sockets, plug-in connector, accepts coaxial cable end, 5144**
- Soda, Rajka, relief, 276, 861**
- Soderstrom, Thomas R., taxonomic study of subgenus Podoseum and section Epi-campes of Muhlenbergia (Gramineae), 17047**
- Sodium:**
 - excretion and renal hemodynamics during lower body negative, 14770

INDEX 1967

Sodium—Continued

- human serum, estimation of change during simulated altitude and aerospace flights, 7341
- liquid, performance of face contact seal by incorporation of spiral-groove geometry, 11505
- liquid solutions, excess solute precipitation kinetics, 5359
- nonwetting, condensing mercury flow in horizontal cooled tubes, heat-transfer, experimental investigation, 11541
- nuclear reactors, sodium-cooled, USSR study, 6527
- operation of hydrodynamic journal bearings in sodium to 800° F, etc., 9901
- steady-state performance of NaK-cooled condenser, 12937
- thermodynamic properties of liquid metal solutions in sodium-mercury system, 9910
- vapors, expansion and flow characteristics, 2717
- Sodium acetate, effect on TmPAH depressed by exposure to hydrazine, 4177
- Sodium arsenite, possible eradicant of fusiform rust infections, 12581
- Sodium chloride, see Salt.
- Sodium-cooled fast reactors, see Reactors (atomic).
- Sodium cyanide, fused, use as electrolyte for deposition of iridium, 16865
- Sodium nitrate, incendiarity of hot gases to methane and coal dust, reduction by sodium chloride and sodium nitrate, 11383
- Sodium tetraphenylborate, microlocalization of potassium in myofibrils, USSR studies, 14217
- Soenda Strait, sailing direction, change, 5330
- Soft drinks:
 - bottled and canned, census of manufactures, 1963, industry report supplement, 8933
 - industry, fair labor standards act, application, 17290
- Softwoods:
 - lumber, kiln-dried, dimensional changes after surfacing and during storage, 2300
 - plywood, construction and industrial, standard of trade, 11586
 - surfaces, ultraviolet irradiated and weathered and clear coatings, microscopic observations, 14123
 - see also names of articles manufactured from softwoods.
- Sohl, Norman F., upper Cretaceous gastropods from Pierre shale at Red Bird, Wyo., 8161
- Soil conservation:
 - abstracts of material published, 8806
 - around the world, 14653
 - county committees, extend benefits to employees, hearing, 10870
 - cropland, 1964-65, conversion program, description and appraisal, 9388
 - districts—
 - highlights, 1966, digest of report, 8694
 - organization and services, 1710
 - status of organization by States, 17207
 - engineering practice standards, SCS national engineering handbook, 13122
 - flood routing, SCS national engineering handbook, 10087
 - loans to foster conservation, questions and answers, 4131
 - our American land, use the land, save the soil, 15839
 - publications, announcement and order form, 14614
 - research in Northeastern States, 38
 - soil conservation (periodical), 3883
 - soil conservation and domestic allotment act, amend with respect to assignment of payments, law, 455
 - statutes, compilation, 7262

Soil Conservation Service:

- activities, 17327
- appropriations, 1968, hearings, 10629, 12387
- career opportunities—
 - general, 5655
 - students, 1705
- conservation aid, CA series, 8693
- conservation information, CI series, 14650
- national engineering handbook, 14652
- policies and practices for rebuilding used motor vehicle tires, GAO review, 14162
- report 1966, digest, 8694
- SCS national engineering handbook, 10087, 13122
- what it is, what it does, 8693
- Soil engineering, see Soil mechanics.
- Soil erosion:
 - Coffee Creek flood of Dec. 1964, erosion and deposition, 17823
 - control—
 - highway embankment protection, use of riprap, 14640
 - structures for airfields and heliports, emergency construction, 110
 - Costa Rica, erosion control problems caused by ash eruptions of Irazú Volcano, 16686
 - exposure and logging effect on, 9537
 - waterline erosion control essential to streambank rehabilitation, 14099
- Soil mechanics, engineering conservation practice standards, SCS national engineering handbook, 13122
- Soil moisture, see Soils.
- Soils:
 - alluvial, sugarcane area of Louisiana, deep-tillage investigations, 1672
 - alpine, Wyoming, pot tests of productivity and nutritive status, 2317
 - applicator for precision placement of chemicals in soil, 1673
 - chemical sealing, feasibility study, 17849
 - citizen's stake in management (remarks), 13219
 - classifying and mapping, aerial-photo interpretation, 4096
 - conductivity in USSR, results of measurements, 14229
 - developed, protected, and geared for sustained use (remarks), 51
 - dynamic characteristics, measurement with penetrometers, 14396
 - evaporation of water, effect of sample size and environmental conditions, 16
 - forest floors and soils under true fir-hemlock stands in Cascade Range, characteristics, 11139
 - forested loess soils after repeated prescribed burns, properties, 8091
 - freezing point depression and heat capacity, thermodynamic relationships, 8878
 - Harrison County, Iowa, 1722
 - hydrologic and physical properties as analyzed, 1948-60, summary, 8182
 - interface between ice and silicate surfaces, 11982
 - know the soil you build on, 11927
 - laboratory stress-deformation characteristics of soils under static loading, 2586
 - landscape evolution and soil formation in southwestern Iowa, 14762
 - micro-organisms, simple, time-saving techniques for studies, 16656
 - Mississippi River Delta, monitoring agricultural pesticide residues, preliminary report of studies, 4086
 - moisture depletion by gambel oak, 4831
 - non-wettable, formation involves heat transfer mechanism, 11124
 - pesticides, equipment for applying, 14735
 - roots and rhizomes distribution in different soil types, Pine Barrens, N.J., 6408
 - science and saving water and soil, 15842

Soils—Continued

site index of Delaware-Maryland sweet-gum stands in relation to soil characteristics, 4832
 slippage increased by brush conversion, 11120
 soft, performance of pneumatic tires, dimensional analysis, 16527
 soil bank programs, statutes, compilation, 7262
 soil moisture tension, responses of 1-year-old cottonwood, 14122
 soil survey investigations reports, 13124-126, 14659-661, 17209, 18216
 soil survey laboratory data and descriptions—
 Colorado, 14659
 Georgia, North Carolina, South Carolina, 18216
 Kentucky, 13125
 Mississippi, 13124
 Oklahoma, 14660
 Puerto Rico and Virgin Islands, 14661
 Tennessee, 13126
 Wisconsin, 17209
 soil survey reports—
 Adams County, Pa., 13123
 Adams County, Wash., 18212
 Arenac County, Mich., 14654
 Beaver Creek area, Ariz., 11803
 Bremer County, Iowa, 18213
 Caldwell County, Ky., 8695
 Chicot County, Ark., 11813
 Coddington County, S. Dak., 7134
 Columbia County, Pa., 11804
 Comanche County, Okla., 15746
 Delta-Montrose area, Colo., 15747
 Elbert County, Colo., eastern part, 1611
 Ellis County, Okla., 8703
 Fisher County, Tex., 2877
 Franklin County, Mass., 8696
 Garfield County, Okla., 18214
 Gray County, Tex., 8697
 Greer County, Okla., 10088
 Grenada County, Miss., 11805
 Gwinnett County, Ga., 15748
 Hall County, Tex., 14655
 Henderson County, Ky., 8698
 Houston and Peach Counties, Ga., 14656
 Iowa County, Iowa, 14657
 Jefferson County, Ky., 8704
 Judith basin area, Mont., 7136
 Kinney County, Tex., 11806
 Lafayette County, Wis., 1610
 Las Vegas and Eldorado Valleys area, Nev., 14662
 Love County, Okla., 8699
 Madison County, Ind., 8700
 Menard County, Tex., 8701
 Metcalfe County, Ky., 7135
 Monroe County, Miss., 5518
 Montgomery County, Pa., 11807
 Parke County, Ind., 13127
 Prince Georges County, Md., 11808
 Prowers County, Colo., 7137
 Queen Annes County, Md., 2874
 Randolph County, Ala., 18215
 Red Willow County, Nebr., 11809
 Rogers County, Okla., 1609
 Roosevelt County, N. Mex., 11810
 St. Francis County, Ark., 2875
 Seminole County, Fla., 2876
 Tate County, Miss., 11811
 Tehama County, Calif., 14658
 Tippah County, Miss., 1612
 Tolland County, Conn., 7138
 Treasure County, Mont., 10089
 Tri-County area, Cass, Ransom, and Richland Counties, N. Dak., 8702
 Tucker County and part of northern Randolph County, W. Va., 11812
 Warren County, Tenn., 17208
 Wood County, Ohio, 5517
 Zuni Mountain area, N. Mex., 15749

Soils—Continued

soil surveys—
 community planning and resource development, report, 2083
 erosion, conservation, publications, price list, 7052
 list, 11802
 stress and wave patterns, dynamic loads, 10255
 surface conditions following skyline logging, 14104
 surface soil recovers quickly after burn, 8097
 thermal conductivity probes, 4201
 see also headings beginning Soil.
 Solister, Paul E., geology of Puddle Springs quadrangle, Freemont County, Wyo., 12602
 Solano, Julio A., relief, 13734, 16192, 17506
 Solar:
 NOTE.—For other subjects beginning Solar, *see* Sun.
 Solar array regulators of Explorer satellites, xii, xiv, xviii, xxi, xxvi, xxviii and Ariel 1, 12927
 Solar batteries:
 control circuit ensures solar cell operation at maximum power, 9832
 drift fields, simplified method introduces into cells, 9857
 silicon cell wafer, introducing selected impurities, process for controlling, 16949
 solar-cell space power systems using spectral dispersion, 15579, 16992
 Solar cells, *see* Solar batteries.
 Solar concentrator, electroformed nickel, geometric efficiency, 14469
 Solar energy:
 direct energy conversion systems for operation in 1.0 and 0.1 astronomical unit range, 6856
 solar-Brayton system turboalternator, parasitic-load speed control, analog computer study, 5258
 solidification in thermal-energy storage systems with axisymmetric heat-transfer solutions, analysis, 5246
 two-spool solar-Brayton system turboalternator, valve-speed control, 5257
 Solar engineering, research, USSR study, 11264
 Solar radiation, planetary albedo effect on solar orientation of spacecraft, 16985
 Solar reflectors, prism, dispersion, 15579
 Solar spectrum, *see* Spectra.
 Solar topography, *see* Topography.
 Solar winds and interplanetary magnetic fields, USSR study, 6749
 Solberg, Erling D.:
 comprehensive plans for improving rural counties, 7265
 suggestions for planning and zoning in Appalachia, 7884
 why and how of rural zoning, 15838
 Solder and soldering:
 brazing alloy holds bonding strength over wide temperature range, 5207
 brazing and brazing alloys, bibliography, 2618, 8439
 brazing tungsten, for high temperature nuclear service in hydrogen, 11506
 electrical connections, handbook, 15517
 high-strength braze joints between copper and steel, 14420
 silver-palladium braze alloy recovered from masking materials, 6793
 tin-lead solders and solder joints, tests, 11388
 ultrasonics permits brazing complex stainless steel assembly without flux, 11392
 Soldier fly larvae in America north of Mexico, 6957
 Soldiers:
 American Army officers' call, theirs to reason why, 15940

INDEX 1967

Soldiers—Continued
civil relief act of 1940 and amendments, compilation, 1994
civil relief act, text, 755
professionalism and the soldier, pamphlet, 4212
Soldiers' deposits, see Deposits (soldiers, etc.).
Soldiers' Home, District of Columbia:
appropriations, 1967, law, 491
appropriations, 1968—
hearings, 9144, 13841
reports, 10612, 15082, 16287
Solenoids:
residual magnetism holds solenoid armature in desired position, 8464
superposed semi-infinite, calculating solenoid magnetic fields, 1469
valve—
design has one moving part, 14425
monitoring circuit accurately measures movement of, 2676
variable-pulse switching circuit controls actuations, 8456
Solicitor, Interior Dept., appropriations, 1968, hearings, 7734
Solid propellants, see Propellants.
Solid solutions, see Solutions.
Solid state image intensifiers, 5343
Solid state phase detector replaces bulky transformer circuit, 14442
Solid-state recoverable fuse functions as circuit breaker, 6845
Solid-state time-to-pulse-height converter developed, 8393
Solid system, numeric compression, alphanumeric compression, 14519
Solid wastes program facts, 13095
Solidification:
radioactive wastes, symposium, proceedings, 5767
thermal-energy storage systems with axisymmetric heat-transfer solutions, analysis, 5246
transient, of warm liquid flowing over chilled flat plate, 12935
Solids:
carbon, adsorption of carbon dioxide, 5351
contact with liquid, classification definitions, 18124
crack propagation theories, 17939
gas-motivated solids dispersion devices, 6687
gas-solids suspensions, power required to circulate, 15483
interaction of solids colliding at high speeds, USSR study, 16744
solid-state physics, new developments, Hungary, 16751
Sollwoda, Sophia, relief, 529, 775
Solomon, Anthony M., address, Nov. 2, 1966, 2936
Solomon, Dale S., stump sprouting of 4 northern hardwoods, 8111
Solomon, J. D., clearwing borer in red oaks, 2326
Solomon Islands, British, mineral industry, minerals yearbook chapter, 9759
Solubility:
metals in liquid zinc, data compiled, 12844
oil-soluble sulfonates, effect of cation, and applicability of mass law, 17095
studies of ultra pure transition elements in ultra pure alkali metals, 1424
Solutes, renal excretion in rabbits, effect of — 7 G. acceleration, 14776
Solutions:
axisymmetric heat-transfer, in thermal-energy storage systems, solidification, analysis, 5246
dilute, form and stability of aluminum hydroxide complexes, 15313
inorganic, foam fractionation, 12642
parenteral—
preparations, Federal standard, 2267

Solutions—Continued
parenteral—continued
safety of large volume, national symposium proceedings, 15275
solid carbide cathodes of uranium and zirconium, evaporation rates, USSR studies, 6532
xenon fluoride, effective as fluorinating agents, 12836
Solvents:
determination of gold in geologic materials by solvent extraction and atomic absorption, 16688
volatile, continuous flow, in-line fractionation and exchange in automated chemistry, 75
Somali Republic:
foreign trade regulations, 12137
labor conditions, 1387
technical cooperation, agreements, 7181, 13147
Soman conditional reflex activities of dogs poisoned with soman and then treated with nemkol-5, Bulgarian study, 6563
Somatic cytogenesis, see Cytogenesis.
Somers, Herman M., program for research in health economics, 10050
Somerset County, Maine, geology and petrology of Greeville quadrangle, 16684
Sommer, Simon C., structure of atomsphere from on-board measurements of pressure, etc., 9904
Sonar targets, ambiguity function independent of assumptions about bandwidth and carrier frequency, 8598
Sonata for 2 clarinets, student composers take over, 7911
Sondermayer, Roman V.:
mineral industry of—
Bulgaria, 6645
Czechoslovakia, 2551
East Germany, 8347
Hungary, 5111
Rumania, 6665
Yugoslavia, 16859
Sondreal, Everett A., bench-scale production of carbon disulfide from lignite char and sulfur, 5127
Song Hyung Ho., relief, 13617, 13784, 14900
Song Kyung Ho., see Song Hyung Ho.
Song Sin Talk, relief, 13617, 13784, 14900
Songe, Alice, vocational education, annotated bibliography, 9414
Songs, Muskogean charm songs among Oklahoma Cherokee, 6973
Sonic boom:
Chicago area, measurements during bomber training operations, 1481
integrals, numerical evaluation, application of Richardson's extrapolation, 6859
Mach number and geometry effects, 18041
propagation, effect of inversion waves, 9427
references, 4753
Sonic equipment, see Sound.
Soniscopes, field tests of concrete, 10-year summary of results, 7934
Soon Kim Kin, see Kim Kin Soon.
Sorenson, Richard C., manpower rotation policy models, 7404
Sorenson, Roy T., flotation procedures for fine-grained hematite ores of Marquette Range, Mich., 14335
Sorex, see Shrews.
Sorghum:
grain—
actions taken to strengthen under USDA programs (address), 24
evaluation of malathion, synergized pyrethrum, and diatomaceous earth as protectants against insects, 11933
growing, 4117
Sorption, see Electrosorption.

Sorrells, Russell B., III, measurement by wake momentum surveys of turbulent boundary layer skin friction on 5 swept wings, 2725

Sorting devices, nondestructive test method accurately sorts mixed bolts, 2679

Sotolongo, Julio C. Müniz y, see Müniz y Sotolongo, Julio C.

Souk You I, see You I Souk.

Sound:

- absorption in air versus humidity and temperature, 6707
- acoustic oscillations in simulated rocket combustion chambers, mechanical absorption, 5264
- acoustical measurements in shipbuilding, USSR book excerpts, 15418
- acoustics of ocean, USSR study, 6587
- calibrating ultrasonic test equipment for checking thin metal strip stock, 12832
- deep ocean acoustic sources, method for determining location, 8588
- electronic dummy for acoustical testing, 16946
- far-field acoustic environmental predictions for launch of Saturn, etc., 16981
- intensity increments, table, 136
- interaction between sound fields and structural vibrations, 9835
- monostatic acoustic scattering from ocean volume, 13034
- monostatic reflection of acoustic waves by elastic spheres techniques for numerically evaluation formulas, 14594
- pressure effect on cryogenic fluid, 12940
- principles, application to outdoor warning systems, 5915
- propagation, from airport ground operations, 11404
- propagation velocity, measurement in Indian Ocean water, USSR study, 15353
- refraction by jet flow and jet temperature, 14389
- scattering in ocean, USSR articles, 9627
- sonomicrometer, sluple portable, 1741
- speed measurement by iterative reflection-interferometry, 9983
- ultrasonics—
 - attenuation for free electrons in presence of magnetic field, theoretical investigation, 2705
 - attenuation in superconduction niobium, 5273
 - effects on electrodeposition of copper alloys from cyanide electrolytes, 9787
 - energy effects on fluid flow in porous media, 14336
 - permits brazing complex stainless steel assembly without flux, 11892
 - propagation parameter measurements systematic errors, iterative reflection-interferometry method evaluated, 9983
 - pulse measurements in anisotropic lake ice, 1754
 - quality inspection of bonded honeycomb assemblies is automated, 2664
 - speaker for studies of acoustic sensitivity of moths, 4083
 - spectrometer, sensitive recording NMR, 2744
 - testing in practice of machine and boiler construction, etc., results, 13339
 - transmission properties of copper braze bonds, correlation with heat transfer properties, 8359
 - TV images improved by use of Lamb-wave orientation technique, 15494
 - ultrasound, biological effects, USSR study, 11268
 - wrench produces leaktight connections, 17965
- volume, scattering in ocean, and measurement of acoustic characteristics of scattering layers, USSR study, 1166

Sound—Continued

- weather effect on transmission from explosive shots, 9773
- see also Noise.
- Sound powered telephone talker's manual, 4422
- Sound projectors, deep ocean acoustic sources, method for determining, 8588
- Sound recordings:
 - archive of recorded poetry and literature in Library of Congress, checklist, 5089
 - housing and community development, bibliography, 11204
 - recording and time expansion technique for high-speed, single-shot transient video signal, 11468
- Sound, The, see Oresund.
- Sounding rockets, see Rockets.
- Soundproofing, houses, insulating from aircraft noise, study, 14188
- Souris River and Valley, geohydrology in vicinity of Minot, N. Dak., 14184
- South (U.S.):
 - and border States, Negro pupils, enrollment, 4711
 - and border States, public school districts—equal educational opportunities programs, status of compliance, 10943
 - status of compliance under civil rights act, 17725
 - basic data on metabolic patterns in 7- to 10-year-old girls, selected Southern States, 13227
 - education, problems (address), 2188
 - employee earnings and hours in 5 metropolitan areas, 5071
 - forest tree improvement research, 9542
 - fresh fruit and vegetable unloads in southern cities, by commodities, States, etc., 7833
- Midsouth—
 - engineering and economic aspects of cotton gin operations, 12452
 - growing loblolly and shortleaf pine, 5827
 - nonmetropolitan areas, employee earnings and hours, 15447
 - precipitation, effects of tropical cyclone rainfall, 15230
 - pulpwood production, 2339, 17809
 - school desegregation, 1966-67, study, 13436
- South and the southerner, seminar on manpower policy and program, 5045
- South Africa:
 - atomic energy, cooperation for civil uses, agreement, 15801, 17240
 - background notes, 1619
 - Basutoland, Bechuanaland, and Swaziland, mineral industry, minerals yearbook chapter, 11357
 - economy, basic data, 1944
 - labor conditions—
 - Basutoland (Lesotho), 6617
 - Bechuanaland, 1366
 - South Africa, Republic of, 2514
 - South West Africa, 2515
 - Swaziland, 1389
 - Lesotho—
 - background notes, 7140
 - continued application of certain treaties concluded between United States and United Kingdom, agreement, 8742
 - investment guarantees, agreement, 11865
 - mineral industry, minerals yearbook chapter, 9760
 - plant quarantine import requirements, 4089, 14734
- South West Africa—
 - background notes, 8710
 - capsule facts for Armed Forces, 13279
 - mineral industry, minerals yearbook chapter, 8364

INDEX 1967

South Africa—Continued

- Swaziland—
 - background notes, 7141
 - capsule facts for Armed Forces, 8873
 - United States relations with, hearings, print additional copies, report, 13655
- South America :
 - angelfish, genus *Pterophyllum*, 8539
 - characid fishes of subtribe *Nannostomina*, 8537
- east coast—
 - lights and fog signals, lists, 5331, 9972, 14578
 - tide tables, 12119
 - fertilizer minerals, sources, 1110
 - health information for travel, 13080
 - Pacific Coast, surface water temperature and density, 17466
 - sailing directions, change, 11633, 13021
 - savings and loan associations, progress made (address), 7960
- west coast—
 - lights and fog signals, list, changes, 1537, 7004, 11642, 18099
 - tide tables, high and low water predictions, 7555
- South Asia, *see* Asia.
- South Atlantic slope basins, *see* Atlantic States.
- South Atlantic States, *see* Atlantic States.
- South Bend, Ind., area wage survey, 11327
- South Carolina :
 - census of agriculture, 1964, State and county statistics, 10395
 - census of manufactures, 1963, area statistics, 4271
 - census of mineral industries, 1963, area statistics, 5841
 - climatological data, 3096
 - congressional districts, 90th Congress, 1886
 - county business patterns, 4318, 12061
 - landings, fish and shellfish, 3884, 16614
 - mineral industry, minerals yearbook chapter, 1404
 - minor elements in alluvial magnetite from Inner Piedmont belt, 8172
 - postal map, 5396
 - precipitation data, hourly, 3401
 - Savannah River and vicinity, geology and ground water for atomic energy plant, 16705
 - soil survey laboratory data and descriptions, 15216
 - textile jobs for non-whites, etc., opportunities, 13994
- South-Central States, *see* Central States.
- South China Sea :
 - western shores—
 - sailing directions, changes, 7003, 11639
 - Singapore Strait to Hong Kong, sailing directions, 17074
- South Dakota :
 - area measurement report, 7458
 - census of agriculture, 1964, State and county statistics, 10394
 - census of mineral industries, 1963, area statistics, 4297
 - climatological data, 3096
 - county business patterns, 1869, 12062
 - electric rate book, 2252
 - mineral industry, minerals yearbook chapter, 5120
 - natural resources, 8209
 - postal map, 5397
 - precipitation data, hourly, 3401
 - public lands, use of income for schools, etc.—
 - law, 12177
 - reports, 10733, 12262
 - radioactivity, airborne, 1952-55, maps, 1803
 - sedimentary rocks, chemical composition, 14172
- South Pacific, *see* Pacific area.
- South Pacific Ocean, *see* Pacific Islands.

- South Pole—Byrd supplement, seismological bulletin, 3863
- South Vietnam, *see* Vietnam.
- South West Africa, *see* South Africa.
- Southeast (U.S.) :
 - America's fertile crescent (address), 4424
 - artesian water in Tertiary limestone, 6399
 - bauxite deposits of southeastern United States (series), 2356-57, 9561
 - Federal power program, financial statements, 1966, GAO examination, 15296
 - forest tree improvement research, 9542
 - ground water of Piedmont and Blue Ridge provinces, 9566
 - how to see, general information, 1659
 - insect damage to corn at harvest time and in farm storage, 14751
 - iron and steel scrap, sources, consumption, etc., 12797
 - pulpwood, 1962-66, price trend, 15286
 - pulpwood prices, 2319
 - State and private forestry, more timber, more jobs, 17798
- Southeast Asia, *see* Asia.
- Southeastern Forest Experiment Station, publications, list, 11109
- Southeastern Power Administration :
 - appropriations, 1967, law, 403
 - appropriations, 1968—
 - hearings, 12287, 16393
 - report, 13678
 - quarterly report, 3798
 - southeastern Federal power program, financial statements, 1966, GAO examination, 15296
- Southeastern States, *see* Southeast (U.S.).
- Southern Forest Experiment Station, publications, list, 3808, 8067
- Southern pine, *see* Pine.
- Southern Rhodesia, *see* Rhodesia.
- Southern States, *see* South (U.S.).
- Southern Ute Indians, *see* Ute Indians.
- Southern Utilization Research and Development Division, publications and patents, semiannual list 17, 8812
- Southport, N.C. :
 - harbor modification, engineer report—
 - departmental edition, 4740
 - document edition, 4475
- Southwell, C. R., corrosion of metals in tropical environments, copper and alloys, 9993
- Southwest (U.S.) :
 - cost of transporting freight by class 1 and 2 motor common carriers, 11235
 - High Plains of Colorado, ground water development, 4893
 - low-income families in Spanish-surname population, characteristics, 9389
 - ponderosa pine—
 - planting sites, herbicides for preparing, 14110
 - vener volume and grade recovery, 14115
- Southwest Idaho project, construct, etc., hearings, 2052, 16418
- Southwestern Power Administration :
 - appropriations, 1967, law, 403
 - appropriations, 1968—
 - hearings, 12287, 16393
 - report, 13678
- Sovereignty, profiles of newly independent states, 11826
- Sovie, Ronald J., radio-frequency induction heating of low-pressure plasmas, 18035
- Soviet bloc :
 - conferences in Soviet bloc (periodical), 3130
 - countries hold symposium on methods of determination, isolation and fractionation of nucleic acids, 6487
 - economic reforms, subcommittee report, 12291
 - Soviet-block research in geophysics, astronomy, and space (periodical), 3886
 - Soviet public health (USSR periodical) :
 - translations, 3889

Soviet Union, *see* Union of Soviet Socialist Republics.

Soviet Zone of Germany, *see* Germany.

Sowder, Arthur M., Christmas trees, tradition and trade, 13216

Soybean meal, futures trading and open contracts, 3368

Soybean oil:

futures trading and open contracts, 3368

stored, predicting quality, 15862

Soybeans:

and products, transportation factors in marketing, 16546

futures, commitments of traders, 3112

futures trading and open contracts, 3366, 3368

growing, recommendations, 8828

stocks in all positions, 1644

SP series, *see* FMC SP series—MA SP series—NASA SP series—Special publication SP series.

Space:

office, for Senate, additional, hearing, 15176

standards, outdoor recreation, 14599

see also Outer space.

Space Administration, *see* National Aeronautics and Space Administration.

Space age, meaning (address), 1516

Space biology:

Aleksandr L. Chizhevskiy, pioneer, 12737

medical and biological problems of space flights, USSR study, 1315

problems in space flight, USSR study, 6485

radiation, 10317

Soviet conference, reports, 1228

what should cosmonauts breathe? USSR study, 5019

Space cabins, *see* Spacecraft.

Space communications:

Apollo data, direct relay via communications satellite, feasibility, 15559

progress report, hearings, 2111

satellites for transmission of unidirectional (simplex) programs, use, USSR study, 15386

spacecraft tracking and communication, NASA facts, 16922

Space environment, *see* Environment.

Space exploration, *see* Outer space.

Space flight, *see* Astronautics.

Space medicine, *see* Medicine.

Space navigation, *see* Navigation.

Space photography, *see* Photography.

Space pilots, *see* Astronauts.

Space port, *see* Launching facilities.

Space probes, space trajectories program for IBM, 7090, 15524

see also Pioneer space probes.

Space radiation biology, 10317

Space sciences:

and applications program, 17021

report to Space Science Board, 2732

Goddard Space Flight Center publications, 1959-62 collection, 11578

mathematics in space science (series), 8513

NASA's space science and applications program, 12877

significant achievements, 8435

space applications, survey, 9824

technology, 8433

Space simulators:

clean vacuum with 1-watt refrigerator, attainment, 12930

NASA facts, 16925

trace contaminants collected, analysis of samples by microwave microscopy, 5711

utilization of infrared spectrophotometry in microcontaminant studies in sealed environments, 8869

Space stations:

dynamic response of elastic space stations, study, 15523

manned orbiting, thermal control considerations, 11538

Space stations—Continued

spinning, optimal attitude regulator, design method, 6894

Space suits:

extravehicular protection and operations, study, 12859

human water exchange, 12863

integrated mobility measurement of man and notation system for designing purposes, 11451

thermal manikin, 1435

Space technology:

dynamic behavior of liquids in moving containers, with applications to space vehicle technology, 5189

Goddard Space Flight Center publications, 1959-62 collection, 11579

notes, 6730-31, 8433

telecommunications, 6731

Space telemetry, *see* Telemetry.

Space vehicles, *see* Spacecraft.

Spacecraft:

acceleration load factor and velocity information, display in spacecraft entry monitoring system, 14439

aeroballistic launch vehicles, minimax attitude control, errata, 1419

aerospace maintenance safety, 2992

aerospace systems and equipment, human engineering design criteria, military standard, 15191

aerospace vehicle structures, metallic materials and elements, military handbook, 7860, 9370

Apollo—

command module—

low-speed dynamic-model investigation of configurations in Langley spin tunnel, 14452

stability characteristics, 8500

data, direct relay via communication satellite, feasibility, 15559

Infrared equipped for reentry tracking, navigation accuracy, 1507

landings, water pressures and accelerations encountered, dynamic model investigation, 16970

launch escape vehicle, aerodynamic stability characteristics, 12925

lunar module, linearized error analysis of onboard primary navigation systems, 15556

lunar return, entry conditions encountered, trajectory optimization, 9919

passive infrared acquisition and tracking system, analysis, 5177

pitch control motor for launch escape system, qualification evaluation, 15560

probe antennas, effects on aerodynamic characteristics, 12948

Apollo/Saturn V replica model, design and fabrication considerations, 16988

arbitrary rotating, equations of motion, approximate solutions, 18054

attitude control—

during launch, 14384

in space, 15500

sensors, survey, 12882

systems, equilibrium analysis and application to, 14499

two subliming-solid-propellant thruster systems performance, 6884

body motions and angles of attack during Project Fire flight II reentry, 8020

cabins, atmospheres—

engineering tradeoffs of one-vs. 2-gas systems, literature review, 12879

physiological factors of inert gases, 9023

selection, engineering criteria, 16912

combustibility of materials in oxygen-helium and oxygen-nitrogen atmospheres, 5706

composite materials for space vehicle application, 12861

contaminants produced by man in space cabin simulator, 11955

INDEX 1967

Spacecraft—Continued

control, applications of artificial intelligence techniques, 12854
 countdown, NASA facts, 16923
 deformation of shallow spherical sandwich shells under local loading, 6895
 Delta 36 (OT-3), performance of X-25S 3d-stage motor, 14460
 delta launch vehicle, lunar orbit mission analysis, 11495
 design review for space systems, 14405
 display-control systems, advanced integrated, simulator evaluations, 14374
 dynamic behavior of liquids in moving containers, 5189
 electrical connections, soldering, handbook, 15517
 entry or reentry vehicles—
 configurations, conical, etc., subsonic longitudinal aerodynamic characteristics, 2701
 feasibility, parametric design, and analysis of unguided solid fuel rocket vehicle, 12853
 heat shield, sensors measure surface ablation rate, 6758
 lifting, ceramic heat shields, study, 15509
 manned lifting vehicles, refurbishable thermostructural panels, research, 2605
 piloted, evaluation of lateral-directional handling qualities, 12860
 refurbishable panel, attachment mechanisms suitable for application, 5160
 shapes, axisymmetric low-fineness-ratio, aerodynamic characteristics, at Mach 6.9, 14495
 tension shell configurations, flow field and heat-transfer investigation, 5270
 unmanned vehicles, tension shell and blunted 100° conical shapes, transonic aerodynamic investigation, 1504
 environment control systems, oxygen regeneration, electrolysis cell, 2607
 environment-simulation testing, effectiveness, 11549
 ESSA, 1st fully operational weather satellite system, 1093
 Federal item identification guides for supply cataloging, supplements, 3293
 fibrous reinforcements for space applications, 11418
 flight control systems, analysis and design, 12871-876, 14383-384, 15497-503
 Gemini—
 configurations, damping and stability in pitch and yaw, errata, 1474
 escape system, development and qualification, 12945
 experiment D-14, dual-channel, VHF-UHF transmitter, 10004
 pictorial review, 1438
 VHF-UHF polarization experiment D-14, antennas, 10009
 Gemini-Agena docking, pilot-controlled, results of simulations employing full-size visual cues, 1495
 guidance and control, 6730
 guidance, electromagnetic study, 16896
 heat transfer and temperature distribution of conical porous membrane during planetary entry, 11554
 HL-10 manned lifting entry vehicle, dynamic model, landing characteristics, 2685
 human operator response to—
 speed, etc., review, analysis and device demonstration, 16904
 step transitions in controlled element dynamics, 5172
 interplanetary vehicles, low-thrust, error analysis of celestial-inertial navigation, 8424
 land landing couch dynamics computer program, 15530

Spacecraft—Continued

landing, Gemini land landing development program—
 full-scale investigations, 6901
 supporting investigation, 6902
 launch vehicles—
 adaptive control, analysis and design, 15501
 axisymmetric vibrations of partially liquid-filled cylindrical containers, 12942
 flight loads, effect of canards in reducing, 14496
 manual guidance of upper stages, piloted simulation study, 9887
 simulated, effects of configuration geometry on supersonic aerodynamic characteristics, 5239
 structural integrity of full-scale segments at transonic speed, verifying technique, 6906
 unguided, slender-body, multistage, aerelastic divergence characteristics, 9883
 United States, for peaceful exploration of space, NASA facts, 9822
 wind and turbulence response by non-stationary statistical methods, 15505
 lifting-body—
 all-flexible parawing for landing, low-speed tests, 11550
 NASA facts, 8430
 liquid-propellant multistage launch vehicle, response of scale model to longitudinal excitation, 11522
 Little Joe II-lunar module model, hammerhead shaped, static longitudinal aerodynamic characteristics, 18013
 location, random-scan display of predicted position, 9994
 lunar-landing research vehicle—
 electronic flight control systems, operational experience, 1496
 Langley research facility, 6875
 lunar-landing vehicle—
 motion during landing impact, procedure for computing, 18043
 touchdown stability, dynamic model investigation, 18042
 lunar module—
 docking with Apollo command module in lunar orbit, dynamic simulation, 11520
 manual control of thrust axis during planar ascent from lunar surface to circular orbit, 1490, 14449
 Lunar Orbiter I—
 extended mission operations, 14395
 extended-mission subsystem performance, 16900
 photography, 14394
 Lunar Orbiter II, photographic mission summary, 17936
 lunar orbiting space vehicles, computer program determines thermal environment and temperature history, 16951
 maintenance and assembly functions, extravehicular, astronaut capabilities to perform in weightless conditions, 15507
 manned—
 extravehicular activities in assembly and operation of large structures, 16901
 lunar landing research vehicle, on-off rate command attitude control system flight-test evaluation, 9888
 orbital, deduction of reentry plasma properties from radio signal attenuation data, 14494
 Mariner IV, review of results, 14402
 matrix-Holzer analyses for fully-coupled vibrations of clustered launch-vehicle configurations, 5158
 measurement of extremely feeble torques on massive bodies, 2696
 medical services and facilities on board, USSR, 8245

Spacecraft—Continued

Mercury-Atlas 7, spacecraft 18, 2d manned 3-pass orbital mission, description and performance analysis, 6865
microbiological examination of space hardware, NASA standard procedures, 15521
midcourse navigation using statistical filter theory, manual theodolite, and symbolic computer control, 6905
minimum fuel ascent from lunar surface, 16994
model, construction units for secondary school industrial arts, 2594
orbital recovery program, selection of recovery sites for return from low circular orbits, 12970
orbiting, use of analog computation in predicting dynamic temperature excursions, 6853
pilot controlled docking simulation of Apollo command and service module with lunar module, 2689
Pioneer spacecraft, NASA facts, 16924
power systems—
advanced technology conference, 1440
electrical component technology, design study, 15964-965, 17399
nuclear reactor simulator for nonnuclear testing, design, etc., 14487
solar-cells, spectral dispersion, 15579, 16992
powerplant, 3-loop Rankine-cycle, steady-state and dynamic operating characteristics, 2603
problem of optimally disorbiting vehicle initially in elliptical orbit, solutions, 8427
Project Mercury afterbody, flight test aerodynamic heating data compared with prediction methods, 14372
random noise and vibration in space vehicles, 17705
refrigerator, gravity independent vapor absorption, 14385
rendezvous and docking, flight control systems, analysis and design, 12874
reusable vehicles, X-15 airplane operation and cost experience, 2711
rotor entry vehicle model, heat-transfer measurements on rotor blade, 12965
rough-water landing characteristics, dynamic model investigation, 9871
slosh dynamics study in near zero gravity, description, 11530
small scientific, application of stored-program computer, 11533
solar orientation, effect of planetary albedo, 16985
spacecraft oceanography, United States activities, 15085
spinning, simulation of—
deployment dynamics, 14471
reaction jet damping and attitude control system, 8485
stability characteristics at Mach numbers of 10 and 26 of proposed slender atmospheric probe, 9894
stability of attitude control systems acted upon by random perturbations, 11399
sterilization technology, conference papers, 5190
storage of biological samples, 9820
structures—
filamentary, meteoroid damage, 16899
modal combination computer program for dynamic analysis, 15527
subsonic static and dynamic stability characteristics of 120° cone configurations, 6893
Surveyor III, preliminary report, 14403
test personnel, use of remotely operated valve to protect, 15551
three-axis attitude and direction reference instrument has only one moving part, 6806

Spacecraft—Continued

tracking and communication, NASA facts, 16922
tracking task for man-machine research related to operator's effective delay time, 1426
USAF aerospace vehicles, information handbook, 15882
vestibular system and human dynamic space orientation, 1428
viral antibody production in animals exposed to space cabin environment, 74
visual attitude orientation and alignment system, 11457
Voskhod spaceship, methods of programmed physiological measurements and experience of its use, USSR study, 6533
Voskhod-2, orbital flight, cardiovascular and respiratory reactions of crewmen, 6555
Voyager 1973 Mars Mission, space flight investigations, opportunities for participation, 17019
see also Launching facilities.—Satellites.
Spacecraft accidents:
Apollo, Jan. 27, 1967—
hearings, 6088-89, 9299, 10796, 12316, 12396
report of review board, 9931, 17020
Spaceflights, see Astronautics.
Spaceport, see Launching facilities.
Spaceship crews:
cardiovascular and respiratory reactions during Voskhod-2 orbital flight, 6555
Gemini escape system, development and qualification, 12945
SPAD (Satellite Position Prediction and Display) equipment, see Electronic computers.
Spaeth, M. G., wave reporting procedures for tide observers in seismic sea wave warning system, 4412
Spain:
atomic energy cooperation for civil uses, agreement, 8736
background notes, 10094
cotton textiles, trade, agreement, 7162
market factors, 13459
mineral industry, minerals yearbook chapter, 12807
tracking stations, agreement, 11833
west coast, sailing directions, change, 7001, 17071
Spalding-Chi method, turbulent-skin-friction and heat-transfer charts, adapted, 11518
Spalvins, Talivaldis, deposition of thin films by ion plating on surfaces having various configurations, 1510
Spangler, Jack G., effects of periodic blowing through flush transverse slots on turbulent boundary layer skin friction, 1431
Spaniol, Joseph F., Jr., United States courts, their jurisdiction and work, 10662
Spanish-Americans:
civil rights status, in Kleberg, Nueces, and San Patricio Counties, Tex., 14848
low-income families in Spanish-surname population of Southwest, characteristics, 9389
Spanish language:
programmatic course, 14682
instructor's manual, 13142
se habla espanol, help for Spanish speaking youngsters, 13964
Spanish West Africa, Spanish Sahara, labor conditions, 5079
Spanworms, elm, annotated bibliography, 2287
Spare parts, see Repair parts.
Sparks, Alton N., large-scale field evaluation of electric insect traps to reduce bollworm populations in Reeves County, Tex., 11915
Sparks, tracer-spark technique for flow-velocity measurements in hypersonic stream, 12856

INDEX 1967

- Sparta, Wis., war on poverty, examination, hearings, 17665
- Speakers, *see* Loud speakers.
- Speakers Bureau for Washington Metropolitan area, 5798
- Speaking of space and aeronautics (series), 2733-34, 5280-81, 9932, 17022, 18059
- Special Assistant to the President for Consumer Affairs, Office of, press releases, 3761
- Special current business reports (series), 3573
- Special Forces, operational funds, NGB pamphlet, 5299
- Special groups, *see* Minorities.
- Special publication SP series, 13024 catalog, 11632
- Special reports, Cold Regions Research and Engineering Laboratory, 98, 1755, 4198-99, 15931
- Special Representative for Trade Negotiations, Office of:
appropriations, 1967, law, 501
appropriations, 1968—
hearings, 10632, 16390
reports, 10616, 16372
nomination of William M. Roth to be Special Representative, hearing, 6107
press releases, 3762
- Specialists:
education specialist and supervisory education specialist, examination announcement—
amendment, 205
discontinuance notice, 5931
educational media, national defense education act, institutes for advanced study, summer 1967, handbook for directors, 1003
freight rate specialist, examination announcement, 206
intergroup relations, examination announcement, 1923
standardization, training must be improved, USSR study, 11261
see also types of specialists, or occupations.
- Specific gravity:
increment cores from interior Alaska trees, 4835
loss in stored cottonwood and willow, relationship to visual estimates of decay, 2299
plantation-grown red pine, predicting, 8061
sulfuric acid, refractometric sensing in lead-acid cell operation, 18112
- Specific heat, low temperature, of palladium containing interstitial hydrogen, 1548
- Specific risk investment guaranty handbook, 4925
- Specific yield, compilation of specific yields for various materials, 16701
- Specifications, *see* Government supplies—
also names of departments, etc., issuing specifications—*also* subjects.
- Specimen handling:
enzyme method of clearing and staining small vertebrates, 11605
storage of biological samples taken during orbital flight, 9820
- Spectacles, eyeglass frames, Tariff Commission report, 18236
- Spectra:
absorption bands of H_2O , D_2O , and CS_2 , intensity measurements, 1550
acridine orange-DNA complex spectra, USSR, study, 12702
beta excited X-ray spectra, compilation, 5789
cadmium sulfide spectrum, effect of optical radiations, etc., on trapping, 14455
characteristics of water-soluble protein fraction of human brain, 12707
computer programs perform spectral analyses of up to 7 time series, 2661
- Spectra—Continued
differential energy and angle Cs137 gamma rays in water and air, 13326
dynamic data characterized by time-varying frequency spectrum, method of analyzing, 16996
emission, of various thermoluminescent materials, 1552
energy distribution of unfiltered X-rays from 250 kV constant potential machine, 1789
far infrared spectra of silicate minerals, study, 9841
flash spectrum from solar eclipse, 11551
frequency spectrum of short-period fluctuations of sea water temperature, USSR study, 1180
gamma-ray, analysis by method of least squares, computer program, 8630
infrared—
metal oxides, 2723
plastics and resins, elastomers, 15636
ion chambers simplify absolute intensity measurements in vacuum ultraviolet, 1447
lunar gamma radiation, spectral composition, USSR study, 1281
neutron spectral consideration affecting projected estimates of radiation embrittlement of Army SM-1A reactor pressure vessel, 1554
power spectral densities, off-road ground roughness, 4195
power-spectral-density computer program, 11481
power spectral shapes, fatigue life under random loading, 17013
solar-cell space power systems using spectral dispersion, 15579, 16992
solar spectrum 2935A to 8770A, table, 1522
spark-source mass spectra of aromatic hydrocarbons using spinning electrode, 11380
spectral energy source, control apparatus, 15004
stellar, theory, 12975
system input, experimental effects in tracking task for man-machine research, 5174
tables of spectral-line intensities below 2450 angstroms, revision, 14514
X-ray, produced when thick silicon targets are bombarded with 1.05 and 1.25 million volts electrons, 2683
X-ray spectral analysis, production of instruments, USSR study, 8265
- Spectrochemical analysis, *see* Spectroscopy.
- Spectrograms, artificial meteors, photometry, 9902
- Spectrographs, fast slitless, description, 18014
- Spectrography, emission, determines trace levels of metallic corrosion, 6850
- Spectrometers:
fast neutron, advanced design, 2669
grating, performance capabilities, 1549
mass—
miniaturized double-focusing, evaluation, 2599
solid materials analysis with ion-microprobe sputter source, 5178
mass, duty-free entry for—
Indiana University, 7652, 14888, 16356
Princeton University, 618, 7651, 14885, 16354
nuclear magnetic resonance, improved, 14433
portable, monitors inert gas shield in welding process, 16960
sensitive recording NMR ultrasonic spectrometer, 2744
X-ray wavelength conversion tables and graphs for qualitative electron probe microanalysis, 17039

Spectrometry:

- atomic absorption, determination of gold in geologic materials, 16688
- coal, advances, absorption, 16848
- gas chromatographic-mass spectrometric methods of analysis, review, 18033
- infrared and ultraviolet techniques and spectra-structure correlations, 6631
- ionizing radiation, main problems, 123
- mass—
 - analytical methods, 11351
 - spectrometric analyses of coal-tar distillates and residues, 14354
 - trace elements contained in samples from closed environment at 258 mm. hg. analysis, 10234
- reactor fuel element solution, analysis, 13333

Spectrophotometers, transmission characteristics of autoanalyzer colorimeter filters determination, 7352

Spectrophotometry:

- atomic absorption, modified method for determining uranium isotopes, 14368
- infrared—
 - measurement of trace levels of deuterium oxide in biologic fluids, 11964
 - use in quantitation of trace levels of deuterium oxide in water, 10236
- utilization in microcontaminant studies in sealed environment, 8869
- report, 14518
- slitless absolute spectral photometry method, 5247
- transmission, determines blood oxygen saturation of hemolyzed samples, 16936

Spectroscopy:

- far infrared spectra of silicate minerals, study, 9841
- flame spectroscopy analytical applications, 1800-1866, bibliography, 8519
- infrared absorption, use for representation of lipids of skin surface, Yugoslav study, 12667
- infrared, intensity measurements of absorption bands of H_2O , D_2O , and CS_2 , 1550
- mass, bibliography of literature, compiled by computer method, 15961, 17393
- microwave, analysis of samples, for trace contaminants collected from space simulator, 3711
- Mosbauer, standard for chemical shift of iron compounds, 15588
- spectrochemical analysis of coal ash, 14342
- temperature measurements in plasmas, 2714

Spectrum, see Spectra.

Spectrum analyzers, calibration, means for rapid method, 14443

Speculation:

- corn futures, trading, 16112
- futures trading and open contracts—
 - cotton, wool and wool tops, cottonseed oil, and soybeans, 3366
 - eggs and butter, 3369
 - potatoes and butter, 3367
- wheat, corn, oats, rye, soybeans, and soybean products, 3368
- potatoes, wool futures, commitments of traders, 3111
- trading in commodity futures, regulations dealing with excessive credit, hearings, 17594
- wheat, corn, oats, etc., commitments of traders, 3112

Speech:

- disorders, causes, etc., 18178
- international characteristics as criterion of emotional state of man under conditions of space flight, analysis, 6507
- pathology, professional careers, examination announcement, 13448
- speech process, conference proceedings, 7061

Speech pathologist, examination announcement, discontinuance notice, 14861

Speed:

- optimal speed problems, USSR study, 4959
- parasitic-load speed control for solar-Brayton system turboalternator, 5258
- static parasitic speed controller for Brayton-cycle turboalternator, 17004
- two-spool solar-Brayton system turboalternator, valve-speed control, 5257

see also Air speed.

Speers, Charles F., pales weevil, 4821

Speir, Reginald, soil survey of Adams County, Pa., 13123

Spelling improvement, phoneme-grapheme correspondences as cues, 1010

Spencer, Bernard, Jr., hypersonic aerodynamic performance of minimum-wage-drag bodies, 1515, 16971

Spencer, John D., pneumatic transportation of solids, symposium, 2542

Spencer, John S., Jr., Arizona's forests, 2336

Spencer, Richard N., electric smelting of complex lead-zinc sinter, 14353

Spencer, Robert H., tip vortex core thickening for application to helicopter rotor noise reduction, 4220

Spergel, Howard, busing kids to suburbs, 10928

Spermatozoa, rabbit, electronic method for counting and sizing, 11954

Sphaeronellopsis monothrix, see Crustaceans.

Spheres:

- ballasted, dynamic flight behavior at Mach numbers 0.4 to 14.5, 18029
- behavior and measurement of wind profiles, 11537
- dielectric, immersed in collisional plasma, resonant frequencies, 12929
- diffraction of normal shock wave by sphere, 17015
- elastic, monostatic reflection of acoustic waves, techniques for numerically evaluating formulas, 14594
- forces on sphere moving steadily along circular path in viscous fluid, 10258
- microscopic, drag coefficients in free-molecule flow, 11407
- opaque, in space, theoretical solution on nonlinear problem of transient cooling, 14458

see also Ulbricht sphere.

Spherical joint connects axially misaligned flanges, 15543

Spheroids:

- orbital prediction and differential correction using Vinti's spheroidal theory for artificial satellites, 5482
- radial spheroidal wave functions of 1st and 2d type, tables—
 - oblate, 10002, 17087
 - prolate, 10010

Sphyrnidae, see Sharks.

Spices, foreign agriculture circulars, 3345

Spider monkeys, see Monkeys.

Spies, see Espionage.

Spijkerman, Jon J., Mossbauer spectroscopy standard for chemical shift of iron compounds, 15588

Spillways:

- Holt Lock and Dam, Warrior River, Ala., hydraulic model investigation, 4744
- Lower Monumental Dam, Snake River, Wash., hydraulic model investigation, 10949

Spin (aircraft):

- relationship between magnitude of applied spin recovery moment and ensuing number of recovery turns, 14474

Spin (atomic):

- finite lattice heat capacity effects on spin-lattice relaxation, 4516

Spin (spacecraft):

- deployment dynamics of spinning spacecraft, simulation, 14471

Spin reduction, see Despinning.

Spinach, canned, U.S. standards for grades, 10879

INDEX 1967

- Spinal cord:
injuries and diseases, research funds, law, 419
injury, bibliography, supplement, 5585
neuronal structure and synapses, characteristics and significance in carnivores, USSR study, 12711
- Spindler, Evelyn B., what to do when your home freezer stops, 10173
- Spindler, Russell S., world geography II, high school course, study guide to be used with USAFI course D 226, 15180
- Spinels, recrystallization of chrome spinel, 9775
- Spinning:
cotton properties, as affected by management practices, 11945
paraboldal tension networks, 16903
spiny bollworm, *see* Bollworms.
- Spiral spring/strain gage combination accurately measures shock induced deflection, 1468
- Spiritous liquors, *see* Liquors.
- Splices, *see* Connectors (electric).
- Spokane, Wash., area wage survey, 16815
- Sponsors:
Neighborhood Youth Corps projects, directory, 2486
Neighborhood Youth Corps, technical information guide to placement of enrollees with epilepsy, 2488
- Spool valve cycles at controlled frequency, 2635
- Sport Arbitration Board, progress, hearing, 17646
- Sport fisheries, *see* Fish and fisheries.
- Sport Fisheries and Wildlife Bureau:
appropriations, 1968, hearings, 7734
employment opportunities, 14056
policy for animal damage control, 11078
resource publications (series), 1081, 2280-81, 4308, 6356, 8033-34, 12548, 15267, 16624-626, 17784-785
technical papers, 4811-12, 8042, 12551, 14070, 16636, 17787
- Sporting goods, Federal Item Identification guides for supply cataloging, supplements, 3292
- Sports:
national sports and physical fitness test, 1561
Peace Corps, 5384
underwater, USSR, 6490, 6552
- Spotlight on day care, 1894
- Spotsylvania, Battle of, 1864, where hundred thousand fell, 1533
- Sprague, G. F., corn production, 1682
- Spray-dried milk, *see* Milk.
- Spray-on electrodes enable ECG monitoring of physically active subjects, 9825C
- Sprayable birefringent coating enables strain measurements on large surfaces, 2680
- Sprayers, power, general information, 1691
- Sprays and spraying:
aerial application, problems
detection of mild poisoning by pesticides, automated method, 13351
endrin and carbon tetrachloride, 4252
L-V-, 17410
gibberellic acid spray, effect on seedlings of eastern redcedar, bur oak, and red oak, 11129
plasma spray process, use in producing multilayer refractory nozzles, 6774
spread factor of water droplets, 10149
- Spreemann, Kenneth P., free-steam interference effects on effectiveness of control jets near wing tip of VTOL aircraft model, 14478
- Spring, freezing temperatures damage knob-cone pine, 8117
- Springer, Victor G., revision of circumtropical shorefish genus *Entomacrodus*, etc., 11604
- Springfield, H. W., percentage of filled four-wing saltbush seeds, 11128
- Springfield, Mass., housing discrimination, report, 4385
- Springs (mechanism):
air spring suspension system for vibration testing, 9881
elastic guides reduce hysteresis effect in Belleville spring package, 8450
excellent spring properties developed in 2 nickel alloys for use at cryogenic temperatures, 17930
- Sprinklers, irrigation systems, description, buying, etc., 5638
- Sprout prevention in potatoes, 17301
- Spruce:
Engelmann—
defect estimation, Blue Mountains of Oregon and Washington, 2289
indicators and associated decay, Colorado, 6371
spruce-air clearcuttings in Colorado, stocking of reproduction, 2314
Spruce budworms, *see* Budworms.
- Spur gears, *see* Gears.
- Spurlock, Hughes H., competitive position of U.S. farm products in Japanese market, 995
- Sputtering, ion-microprobe sputter source, mass spectrometer analysis of solid materials, 5178
- Squabs, raising, 13221
- Squad leaders, guide for squad leaders, Army pamphlet, 11988
- Squash, pickleworm control, 4116
- Squaxin Indians, convey land to Squaxin Island Tribe, reports, 16239, 17627
- Squids, review of Valybeuthidae and evaluation of its relationship with Chiroteuthidae, etc., 14538
- Squire, James L., Jr., surface temperature gradients observed in marine areas receiving warm water discharges, 14070
- Sprawley, John E., stress intensity factors for crack-line-loaded edge-crack specimens, 6869
- Srinivasan, S., simultaneous development of velocity and concentration profiles in reverse osmosis systems, 11218
- SRS series, 5559
- SSA, *see* Social Security Administration.
- SSC, *see* Ship Structure Committee.
- SSI series, 11801, 14647-649, 15741-742, 17204, 18209-210
- SST (supersonic transport), *see* Airplanes.
- Stabe, Roy G., cold-air performance evaluation of fuel pump turbine for M-1 hydrogen-oxygen rocket engine, 6868
- Stability:
dynamic, of rotor-bearing systems, 1439
numerical solutions of ordinary differential equations, 5243
precision capacitor has improved temperature and operational stability, 16885
riprap, under wave action, rock movement in large-scale tests, 16520
static—
effects of jet pluming of ballistic bodies at Mach number of 6.00, 2691
effects of jet pluming on rocket models, 14467
single-stage sounding rocket, investigation, 12933
theory of multistep methods, 15223
thermosetting plastics, improved strength, thermal and chemical stability, 14412
- Stability of aircraft:
all-flexible parawing vehicle, wind-tunnel investigation of static aerodynamic characteristics, 11488
augmentation system, effects on performance of non-instrument-qualified light-aircraft pilots during instrument flight, 11519
- DYNAGYRO, mechanical stability augmentation system for helicopters, 13307
dynamic, transport cruising at Mach number 3, errata, 14447

Stability of aircraft—Continued

Geminal configurations, oscillatory stability in pitch and yaw, errata, 1474
influence of response feedback loops on lateral-directional dynamics of variable-stability transport aircraft, 11516
static stability characteristics of 76° swept arrow wing model, etc., 14473
variable-sweep tactical fighter model, rolling stability derivatives at subsonic and transonic speeds, 6887

Stability of spacecraft, see Spacecraft.

Stabilization:

economic, promote by requiring disclosure of finance charges for extended credit—hearings, 10822, 12402
report, 13812

lead-zinc industry—

hearing, 12413

report, 10752

national policies, ideology and inflation, implications of price and wage trends (remarks), 15249

Stacking-fault energy, *see* Force and energy.

Stacyville quadrangle, Maine, bedrock geology, 17825

Stadiums, seating, market analysis, 14132

Staff development, *see* Administrative development.

Staff nurses, *see* Nurses and nursing.

Staffing American colleges and universities, 7913

Stage, *see* Drama.

Stagnation point:

boundary layer with suction and injection

in equilibrium dissociating air, 8499

general 3-dimensional, heat and mass transfer, 12869

Stainless steel:

alloys—

alloy 301, materials data handbook, announcement and distribution information, 9851

corrosion resistance in nuclear reactor superheaters, 8797

in aqueous environments, crack propagation, delayed failure, and residual static strength, 6872

complex assembly, ultrasonics permits brazing without flux, 11392

electroless nickel plating, 5202

powder compact, homogeneity characterization of NBS spectrometric standards, 2737

stabilization of carbon and nitrogen, and its effect on mass transfer in stainless steel-Ch-Zr-potassium system, 12864

stabilizing components for cryogenic service, 17987

surgical cutting instruments, USSR study, 6517

table flatware, Tariff Commission report, 1646, 17255

type 316, high temperature vacuum fatigue testing with resonance-type machine, 11676

Stains and staining:

procion bright-red as vital stain, USSR study, 14212

vital staining of muscle tissue during excitation, USSR study, 14255

Stains and staining (microscopy):

enzyme method of clearing and staining small vertebrates, 11605

Well stain on liver, histochemistry, aerial application, problems, 10320

Stall (aircraft):

pitch-up, piloted stimulation study of operational aspects, 12967

stall barrier as new preventive in aviation accidents, 1823

Stallings, Robert L. jr., local flow properties and drag coefficients for family of blunt bodies, 18056

La Stampa (periodical):

index, 3410

La Stampa sera (periodical):

index, 3410

Stamper, John W., titanium, 8380

Stamps, *see* Food stamps—Migratory-bird-hunting stamps—Postage stamps.

Standard industrial classification manual, 8922

Standard Magnetic Observatory, *see* Automatic Standard Magnetic Observatory.

Standard Meat Co., relief, 7640

Standard terminology for instruction in State and local school systems, 10942

Standards and Conduct, Select Committee on. House:

create—

hearings, 6042, 7754

report, 651

Standard and Conduct, Select Committee on, Senate:

hearings, 9331

report, 9296

Standards and standardization:

commercial standard series, 5283, 8517, 11581, 12978

DCS equipments/systems performance standardization program, DCA circular, 9360

Defense Department—

cataloging and standardization program, semiannual reports, 6032, 7739, 16313

specifications and standards, index, 13920, 15188

supplements, 3412

standardization documents, supply

classification listing, 3324, 13919

standardization policies, procedures, etc., manual, 3593

directory of United States activities, 15589

directory SD series, 16474

Federal specifications and standards, index, 6335

supplements, 3409

Federal standards, 1072, 2267-70, 4794-96, 6307-33, 8008, 9498, 11062-65, 16601-604, 17764

guide, 4885

Federal test method standards, 9499, 15252, 16605

International commercial standards activities, U.S. participation, hearings, 753

military standards, 4678, 6151, 7861-62, 9372-78, 10899, 15189-198, 12443-444, 16465-471, 17700

NASA specification and standards, 15520

national standard reference data system, extend service—

hearings, 12405

reports, 10601, 14956

product standard PS (series), 5285-87, 6918-19, 11586-587, 12988, 17037

publications, price list, 2804

standard for accurate phase-angle measurements at audio frequencies, 6924

standard reference materials—

catalog and price list, 17033

general information, 11585

NBS white cast iron and stainless steel

powder compact, 2737

new materials, publications, etc., 11588

news for users of, 12987

standards laboratories, conference, 1966

proceedings, 12983

training of specialists in standardization must be improved, USSR study, 11261

USSR, recent developments in standardization, 8240

see also Labor standards—*also* subjects.

Standards of Official Conduct Committee, House:

establish, report, 9109

operating funds, authorize, report, 16253

Standards of performance for film badge services, 10047

INDEX 1967

Stanford Linear Accelerator Center, remarks, 15975
 Stannous chloride, vapor pressure, $\text{SnCl}_2\text{-ZnCl}_2$ binary system, 16864
 Stannous fluoride:
 mouthwash, use in school preventive dentistry program, feasibility study, 17352
 use as prophylactic paste, as topical solution, and in dentifrice, clinical evaluation, 14319
 Stansell, Marion J.:
 measurement of trace levels of deuterium oxide in biologic fluids using infrared spectrophotometry, 11964
 process for continuous flow, in-line fractionation and exchange of volatile solvents in automated chemistry, 75
 quantitation of trace levels of deuterium oxide in water using infrared spectrophotometry, 10238
 Stanton, Beryle, news for farmer cooperatives, 3631
 Star, Shirley A., number and kinds of children's residential institutions in United States, 13415
 STAR, *see* Scientific and technical aerospace reports
 Starbird, I. R., costs of producing upland cotton in United States, supplement, 16485
 Starch:
 and related products in selected countries, 15986
 classification definitions, 18123
 use in textile industry, economic evaluation, 7881
 Starfishes, ornamental use, 6346
 Starr, Fred E., relief, 333
 Starr County, Tex., administration of justice, civil rights aspects, 13433
 Stars:
 analytical approach to determination of stellar fields of view, 11557
 5,000- and 10,000-year star catalogs, 8683
 micrometer measures of 256 double stars, 11628
 micrometer measures of 1164 double stars, 15623
 point-source light sensor circuit is insensitive to background light, 2637
 star/horizon simulator used to test space guidance system, 11447
 stellar evolution, calibration of Hertzsprung-Russell diagram in terms of age and mass for B and A stars, 2702
 stellar spectra, theory, 12975
 variable, in Small Magellanic Cloud, 2859
 STARS (satellite telemetry automatic reduction systems), *see* Electronic data processing systems
 Starting and managing series, 5497, 8679, 15733
 Starvation:
 acute, body composition changes, metabolic aspects, 7412
 acute, in normal humans, metabolic aspects—
 ten days, 122
 performance and cardiovascular evaluation performance, 121
 State aid, *see* Grants-in-aid
 State and local government employment and payrolls, 3894
 State banks:
 member banks of Federal reserve system, list, supplements, 3895
 membership in Federal reserve system, weekly changes, 3090
 State boards and departments of education, *see* Educational boards and departments
 State courts, habeas corpus, applications for writs by persons in custody pursuant to judgments, law, 425
 State Department:
 appropriations, 1967, law, 501
 appropriations, 1965—
 amendment, 13721

State Department—Continued
 appropriations, 1968—continued
 hearings, 10632, 16390
 reports, 10616, 16372
 background notes, 1613-24, 5520-23, 7139-42, 8707-10, 10090-95, 11814-821,
 13130-136, 14664-669, 15753-762,
 17212-216, 18221-225
 biographic register, 14670
 bulletin, 3198
 career opportunities—
 communications and records, world-wide assignments, 5524
 secretaries, stenographers, typists, 11831
 contracts for diamonds for stockpile, balance-of-payments aspects, GAO report, 15293
 cultural presentations, USA, report, 17226
 department and foreign service series, 2879, 8711-12, 10096-98, 14670-671, 17217, 18226
 film library, film list, 8717
 food donation programs administered by nonprofit organizations, extent of audits, GAO report, 8149
 Foreign Service travel regulations, revision needed to reduce per diem costs, GAO report, 15298
 general information, 17217
 indexes, living costs abroad, 5084
 international information and cultural series, 7150, 14678, 17226
 news letter, 3199
 organizational ineffectiveness within department, causes, 5525
 press releases, 3763
 publications—
 annotated bibliography, 7146
 list, 3868
 records, microcopy, pamphlet to accompany—
 internal affairs of
 Bolivia, 18063
 Central America, 18067
 Honduras, 18064
 Nicaragua, 18062
 political relations of U.S. and—
 Belgium, 18068
 Costa Rica, 18066
 Honduras, 18065
 relating to Belgium and other states, 18069
 reorganization, hearings, 956, 2121, 4642, 6112
 Index, 16416
 science, foreign affairs, and State Department (address), 14671
 secretaries, overseas opportunities, 8722
 security, investigation, hearings, 2131
 seminar, civil rights and race relations, 2879
 tape-recorded briefings, discussion guides, 18227
 telephone directory, 15764
 United States agencies in Vietnam, audit and inspection programs, 1966, GAO review, 9553
 Vietnam commercial import program, AID's management and operation, GAO review, 15302
 State Departments of Education, Advisory Council, *see* Advisory Council on State Departments of Education
 State forestry, *see* Forests and forestry
 State Health Agencies, Advisory Committee on HEW Relationships with, *see* Advisory Committee on HEW Relationships with State Health Agencies
 State of the Union, *see* United States
 State postal map series, 5391-5402, 11698, 15649-15662
 State Technical Services, National Conference, *see* National Conference on State Technical Services

State Technical Services Office :

annual report, 7572
 newsletter, 3896
 program (remarks), 4450
 Statements, *see* Addresses, lectures, etc.
 States :
 aerial dispersal of pink bollworm, 5678
 agencies for surplus property, directory, 5188
 agriculture departments, 1967, directory, 7836
 air pollution control programs, 2838
 air pollution laws, digest, 1568
 approval of teacher education proposed standards, 6195
 arts activities, summary, 6930
 billboard removal compensation under highway beautification act of 1965, opinion of Attorney General, 8279
 brucellosis eradication activities, 3919
 census of population, 1960, migration between State economic areas, 13402
 chickens and eggs, monthly egg production, 5684
 child labor law, summary, 5047
 citrus fruits, production, use, value, by States, 1909-10, 1964-65, revised estimates, 5679
 civil defense directors, list, 1904, 14844
 civil defense, labor's role, training course, instructor's guide, 198
 climates, 4746, 9425-26, 16530-531
 compensatory provisions for occupational diseases, 8337
 congressional districts, redistricted for 90th Congress, 183, 1886-88
 congressional redistricting standards, establish, reports, 9121, 9126, 10793, 13657, 17573
 construction expenditures, 5891-93, 10384, 16033
 cooperative State-Federal salmonella reports, review of salmonellosis in cattle, 9
 county business patterns, 1965, employment and payroll statistics by county and by industry, 7475
 debt pooling, laws prohibiting or regulating, 5048
 discrimination in employment, laws prohibiting—
 because of age, summary, 5050
 fair employment practice acts, 5049
 divisions of vocational rehabilitation and agencies for the blind, directory, 7220
 education departments' guidance, counseling and testing publications, guide, 6185
 education, unfinished work (address), 2192
 educational records and reports series, handbook, 10942, 16509
 elective offices, 13361
 employee-retirement systems of State and local governments, 1965-66 finances, 7492
 employment and earnings statistics, 14283
 equal pay laws, 2975
 farm labor situation, 7882
 Federal grants—
 construction of roads, laws, compilation, 1988
 gold mining subsidies, hearings, 12302
 guidelines for plan programs for education of handicapped children, 10933
 health planning and services—
 hearings, 12305, 17670
 law, 461
 reports, 16230, 16247
 highway construction act of 1966—
 hearings, errata, 4656
 reports, 638, 646
 highway safety act of 1966, report, 646
 medical assistance under title 19 of social security act, limitations, report, 697
 provide periodic congressional review, etc., hearings, 735

States—Continued

Federal grants—Continued

radiation workers recordkeeping, hearings, 1974
 vocational rehabilitation services to the handicapped, etc.—
 hearings, 15172, 17600
 law, 16144
 reports, 14972, 16366
 6 steps forward, 17186
 Federal-State highway management practices and procedures, hearings, 2055
 flags, reproductions, 519
 forest fire control—
 cooperative program financing, 9527, 15276
 laws, analysis, 9526
 forestry schools, list, 4822
 fresh fruit and vegetable shipments, 10873-874
 governments—
 education directory, 15211
 employment of scientific, professional, and technical personnel, 15450
 finances, 1966 summary, 10380
 handicapped persons, employment assistance for, directory, 15664
 health authorities, 1967, directory, 15680
 health insurance enrollment under social security, 10083
 highway beautification projects, public participation, 5477
 highway safety programs, national uniform standards, 13555
 honey and beeswax, production, etc., 4150
 Indian-State relations in their historical perspective (address), 15322
 interlocal governmental cooperation, study of 5 States, 13942
 interstate taxation act, reports, 9084, 13682
 ionizing radiation legislation and regulations, 7093
 labor laws for women, summary, annual digest, 14281
 labor legislation enacted in 1966, 5052
 land-grant colleges and universities, Extension Service review (periodical), 3255
 law enforcement, Federal assistance, amend act—
 law, 502
 reports, 635, 929
 laws—
 compulsory school attendance, summaries, etc., 2191
 prohibiting or regulating debt pooling, summary, 16811
 sex discrimination in employment, 17295
 veterans' rights, benefits, etc., digests, 16345
 legislation, 1966, of special interest to women, highlights, 11910-911
 legislation of special interest to women, 1966 highlights, 10141
 legislative program of Advisory Commission on Intergovernmental Relations, 15822
 legislatures, equal pay activity, 2974
 life tables, 1959-61—
 Alabama-Missouri, 5444
 Montana-Wyoming, 5445
 local government, interlocal agreements and contracts handbook, information report, 8801
 manpower and training needs in water pollution control, report, print as Senate document, report, 16362
 maximum daily hours for women, 2976
 maximum weekly hours for women, 8795
 maximums and other methods of limiting money payments to recipients of special types of public assistance, 18205
 mental health authorities, conference with Surgeon General, Public Health Service, proceedings, 5457
 mental health planning, 1966 final reports, 17141

INDEX 1967

States—Continued

mental hospitals, patient movement, etc., 15697
 merit systems, extend to additional programs financed by Federal funds, hearings, 12409
 milk cows on farms, production per cow, etc., 5683
 minimum wage laws and orders, fringe benefit provisions, 5595
 names, abbreviations for use with Zip code, 7043
 national and international labor unions, directory, changes, 2498
 National Driver Register, records exchange service, 18087
 noxious weed seed requirements recognized in administration of Federal seed act, 2138-39
 outpatient psychiatric clinics, annual statistical report, 14633
 partnership for health, information and policies on grants to States—
 comprehensive health planning, 15702
 public health services, 13086
 plant regulatory officials, 5618
 population—
 estimates, 178, 4352
 households estimates, 7486
 illustrative projections, 5883
 revised projections, 16014
 postal maps, 5391-5402, 11698, 15649-662
 pricing methods used in purchase of prescribed drugs under federally aided public assistance programs, Welfare Administration, GAO review, 9556
 prisoners, 1964, admissions and releases, 17129
 professional workers in agricultural experiment stations and other cooperating institutions, 5622
 psychiatric clinics, 1964, outpatient service—
 data on patients, annual statistical report, 1586
 older adult patients, 5453
 public assistance, costs—
 per casemonth, 1966, for administration, services, and training.
 State and local administration, services, and training, 15233, 16541
 public facility needs and financing, study, 1977
 print additional copies, reports, 6082, 10586
 public school finance program, 1966-67, compilation, 17724
 publications, monthly checklist, 3569
 reinforcing role in education, 13961
 report on 1965-66 compensatory education programs under title I, Public law 10, 7890
 salary ranges of positions in employment security, etc., 4898, 11194
 school systems—
 standard terminology for instruction, 10942
 statistics, 7914
 Senators, 90th Congress, list, 9179
 soil conservation districts, status of organization, etc., 17207
 soil surveys for community planning and resource development, report, 2083
 southeastern, State and private forestry, more timber, more jobs, 17798
 State and local government retirement systems covering employees also covered by Federal old-age, survivors, disability, and health insurance program, survey, 2868
 State and local programs, planning, criteria for evaluation, study, 16411
 State and regional defense airlift planning, change, 9447
 State government and education challenge (address), 1015

States—Continued

State-local taxation and industrial location, interrelationship, 15823
 State safety code activity, 1965-66, highlights, 6600
 State safety code comparison studies, 5053
 tax collections, report, 180
 tax revenue, quarterly summary, 5894, 7495, 10385, 16034
 taxation of farmland on rural-urban fringe, summary of preferential assessment activity, 16486
 technical services act of 1965, amend to include Guam—
 law, 475
 report, 891
 technical services activities (remarks), 4450
 technical services, designated agencies, list, 10469
 technical services, discipline-oriented or problem-oriented? (address), 4452
 technical services national conference, report, 12131
 unemployment insurance laws—
 comparison, revised series, 6199, 17727
 evaluation of coverage and benefit provisions, summary tables, 12471
 significant provisions, 13973
 utility commissions, summary and tabulation of information, 17655
 vocational rehabilitation agencies—
 caseload statistics, 5588
 heart disease, cancer, stroke, characteristics of clients rehabilitated, 7221
 vocational-technical program development, reports, 6196
 women's eligibility for jury service, laws, 5603
 workmen's compensation laws—
 comparison of major provisions with recommended standards, 5046
 summary, 9696
see also Intergovernmental relations.
 Statewide long-range planning for libraries, report of conference, 1016
 Stati Uniti d'America, informazioni doganali ad USO dei Nonresidenti, 13907
 Static electricity, *see* Electrostatics.
 Static inverters, *see* Inverters.
 Static parasitic speed controller for Brayton-cycle turboalternator, 17004
 Static stability investigation of sounding-rocket vehicle at Mach numbers from 1.50 to 4.63, 12934
 Station wagons, standard models and special equipment requirements, military standard, 15189
 Stationary device produces homogeneous mixture of fluids, 5221
 Stationery, House Members, additional allowance, report, 7676
 Statistical abstract of United States :
 departmental edition, 14834
 document edition, 14923
 supplement, county and city data book, 1967—
 departmental edition, 12041
 document edition, 12201
 Statistical briefs from around world (periodical), 3898
 Statistical decision :
 decision model algorithm of Leont'yev type, 17879
 regulation of problems in statistical dynamics of automatic control systems, USSR study, 11244
 Statistical design, *see* Statistics.
 Statistical inference, theory and methods, 8507
 Statistical processes :
 control of nonlinear multivariable systems, 6725
 Gaussian quadrature, abscissas and weights for, 5284

Statistical processes—Continued

multivariate equations developed for predicting volumes in Hawaii hardwoods, 8084

Statistical publications, *see* names of departments, etc., issuing publications.

Statistical Reporting Service: appropriations, 1968, hearings, 10629, 12397

periodic reports, list, 10195

reports, checklist, 3091

SRS series, 5559

Statisticians:

- agricultural, examination announcement, discontinuance notice, 17459
- examination announcement, amendment, 17453

Statistics:

- college course, basic statistics, study guide, 9362
- combination statistical design for sensitivity testing, Mines Bureau circular, 9754
- credibility, importance (remarks), 5038
- Federal, local areas, directory, guide to sources, 1879
- Federal statistical directory, 13353
- Government programs, coordination and integration—
- hearings, 14917
- report, 14918
- metropolitan area statistics, 16032
- public health conference, proceedings, 11th national meeting, 18185
- statistical reporter (periodical), 3900
- statistical series releases, SEC, 3901
- statistical studies in field geochemistry (series), 9578
- see also* Regression (statistics)—Sampling (statistics)—Vital statistics—*also* subjects.

Stators:

- downstream, contribution to interaction noise of single-stage axial-flow compressor, 9882
- overall stator performance and turbine design, cold air investigation of turbine for high-temperature engine application, 5286

Statuary, *see* Sculpture and statuary.

Status of forces agreements, *see* Criminal jurisdiction.

Status of Women, Governors Commission on, *see* Governors Commission on Status of Women.

Status of world's nations, 17222

Statutes, *see* Law.

Statutes at large:

- 89th Cong. 2d sess.—
- private laws, concurrent resolutions and proclamations, 16587
- public laws and reorganization plans, 14036
- tables of laws affected, 2257

Statutes of limitations, *see* Limitations (law).

Steady-state performance of 7-tube NaK-cooled potassium condenser, 12937

Steam:

- high velocity, within tube, local heat transfer coefficients and static pressures for condensation, 9911
- low pressure steam-water flow in heated vertical channel, final report, 7430
- superheated, zirconium alloys with improved corrosion resistance, 9796

Steam-electric plants, *see* Electric power plants.

Steam power plant, equipment, Federal item identification guides for supply cataloging, supplements, 3258

Steamship conferences, *see* Shipping conferences.

Steamships, lines in foreign commerce of U.S., approved conference, rate and inter-conference agreements, 3037, 16576

Stearic acid, carbon 14 labeled, adsorption on iron, study, 14595

Stearns, R. T., preshot geophysical measurements, 15962

Stearns, Russell S., permafrost, perennially frozen ground, 1756

Stebbins, Frederick J., stiffness matrix solution for shells of revolution possessing variable thickness heat protection, 11514

Steel:

- A302-B, simulated pressure vessel wall, neutron exposure, through-thickness notch ductility and tension properties, 17093
- and tantalum apparatus, use for molten Cd-Mg-Zn alloys, 8397
- chemical composition and hardenability, Federal standard, 11063
- corrosion resistant, controlled ferrite content improves weldability, 8475
- forgings, current industrial reports, 3169
- foundries, current industrial reports, 4329
- heat treatment and properties, 2739
- high strength braze joints between copper and steel, 14420
- higher strength, neutron irradiation embrittlement, 5356
- identification symbols, Communist China, 6547
- industry, 1947-65, indexes of output per man-hour, 5055
- industry, water requirements, 12617
- ingot producers, current industrial reports, 4329
- iron and steel scrap, Southeast, sources, consumption, etc., 12797
- minerals yearbook chapter, 2544
- oxygen steelmaking, effect of lime structure, 6652
- plain carbon, effects of rare-earth additions, 6686
- products, identification markings, Federal standard, 2269
- products, packaging, marking, and loading methods, recommendations of trade, amdt., 6920
- reactor pressure vessel, neutron embrittlement, 5355
- SAE 52100 steel hollow balls, rolling-element fatigue life, 6579
- scrap, intermountain and northwestern Plains States, processing and marketing, 16855
- steel test panel helps control additives in pyrophosphate copper plating, 17969
- structural, radiation sensitivity, metallurgical variables as possible factors controlling, initial evaluations, 5357
- T-1 and T-1A steel welds, effects of heat input rates on, 12594
- trade and tariff information, summaries, 18237
- ultrahigh-strength, study to minimize hydrogen embrittlement, 11470
- welded steel penstocks, design, construction, etc., 17178
- welding of AM 350 and AM 355 steels, 15552
- see also* Stainless steel—*also* names of manufactured articles.

Steel castings, *see* Castings.

Steel mills:

- inventories of shapes, current industrial reports, 3169, 12073, 14829
- products, current industrial reports, 12081

Steele, Chester L., nomination, hearings, 6094

Steele, Gordon N., research on condensation mechanisms, 1140

Steele, Lendell E., neutron irradiation embrittlement of higher strength steels, 5356

Steelmark Month, designate May of each year, law, 417

Steelworks industry manpower survey, 17729

Steeple Rock mining district, N. Mex., geology and ore deposits, 6390

Stein, Edward S., calibration of 2 bicycle ergometers used by health examination survey, 7096

INDEX 1967

- Stein, Lawrence H., STOP, computer program for supersonic transport trajectory optimization, 11415
- Stein, Manuel, incremental procedure for solution of nonlinear problems with applications to plates and shells, 2727
- Stein, Kalsis, and children, relief, 7655
- Steinbeck, Klaus, short-term storage of yellow-poplar softwood cuttings, 11131
- Steinhilber, August W., State law on compulsory attendance, 2191
- Steinke, Ronald J.:
 - aspect ratio and curvature variations for axial-flow-compressor-inlet stages under high loading, 9916
 - variable-geometry guide vanes to control rotor-inlet flow conditions, 5275
- Stellar evolution, *see* Stars, 1-2
- Stellators, Livermore, 1-2
- stellator, 13329
- Stelluto, George L., industry wage survey, hospitals, 15448
- Stenographers:
 - career opportunities await you, Army Department, 8896
 - examination announcement—amendment, 14855
 - supplement, 7549
 - opportunities in State Department, 11831
 - opportunities with FDA, 8046
- Stenomidae, systematic position of 2 taxa erroneously placed in family Stenomidae (Lepidoptera), 5304
- see also* Microlepidoptera.
- Stephens, David G.:
 - effect of model scale on structural-joint damping, 18025
 - flexible and rigid ring baffles for damping liquid oscillations in large-scale cylindrical tanks, 8493
- Stephens, Joseph R., dislocation structures in slightly strained tungsten, etc., 14486
- Stephenson, Richard W., land ownership maps, checklist of 19th century U.S. county maps in L.C., 16837
- Stephenson, Robert L.:
 - river basin surveys papers, inter-agency archeological salvage program—departmental edition, 11973
 - document edition, 12193
- Stephenson, William:
 - Australasian and American Hemisquilla ensigera, 6935
 - portulid crabs from international Indian Ocean expedition in Smithsonian collections, 12398
 - portulid crabs from Pacific and Indian Oceans in collections of Smithsonian Institution, 8540
- Steppes, snow cover and calculation of snow floods, USSR study, 1203
- Stepping up with FACE, 7915
- Sterculiaceae, *see* Melochia.
- Stereochemistry of organic compounds of phosphorus and arsenic, USSR, 1209
- Stereographic representation of Knoop hardness anisotropy, 18051
- Stereoscopic angle and its relationship to standard Air Force tests for depth perception, 70
- Sterility:
 - chemosterilants to control bark beetles, 14108
 - Health, Education, and Welfare Department activities, report on family planning, 1136
- Sterilization:
 - central sterile supply section of packaged disaster hospital, organization, 1577
 - classification definitions, 18119
 - spacecraft technology, conference papers, 5190
- Stern, Kurt H., Liesegang rings, 15590
- Stern, Robert L., technology and world trade, proceedings of symposium, 8520
- Sternberg, Heinz W., electrochemical reduction of coal, 16862
- Stern, Mauritz A., relief, 16164
- Sternes, Gilbert L., climates of States, Oregon, 16531
- Sternlight, Peter D., remarks, Nov. 18, 1966, 2951
- Steroids, excretion during exposure to oxygen-helium atmosphere, 7366
- Sterrett, James R.:
 - secondary jets from 2-dimensional nozzles with various exit Mach numbers for hypersonic control application, 5266
 - transition fixing for hypersonic flow, 18011
- Stethoscopes, electronic, for aircraft use, experimental, 11966
- Stevens, C. A., feasibility study of accelerator-booster, fast, pulsed research reactor, 13322
- Stevens, Mary R., automatic typographic-quality typesetting techniques, state-of-the-art review, 9942
- Stevens, Paul M.:
 - effects of lower body negative pressure on physiologic changes due to bed rest, 7346
 - effects of 9-alpha-fluorohydrocortisone and venous occlusive cuffs on orthostatic deconditioning of prolonged bed rest, 7365
 - influence of long-term lower body negative pressure on circulatory function of man during prolonged bed rest, 1416
- Stevens, Richard E., Jr., tungsten, 1416
- Stevens, Robert E., ponderosa pine tip moth, 4820
- Stevenson, Henry E., naval training bulletin, 3611
- Stewards:
 - 1 and C, Navy training course, supp., 9979
 - 3 and 2, Navy training course, supp., 9979
- Stewart, John H., erosion and deposition produced by flood of Dec. 1964 on Coffee Creek, Trinity County, Calif., 17823
- Stewart, Joseph E.:
 - effect of load pattern on transit temperatures and crushing of lettuce in transcontinental shipments, 1916
 - market quality of film-wrapped and naked-packed lettuce, 10152
 - nitrogen, its effect on transit temperatures and market quality of western lettuce shipped in piggyback trailers, 5644
- Stewart, M. A., cleaning and liquid contact with solids, classification definitions, 18124
- Stewart, Maxine G., occupational outlook quarterly, 3649
- Stewart, B. Keith, water pollution control, waste treatment and water treatment, selected biological references on fresh and marine waters, 8011
- Stewart, Ward, university-sponsored executive development programs in public service, 2193
- Stewart, William H.:
 - addresses, etc.—
Nov. 27, 28 and Dec. 6, 1966, 7080
Mar. 21, 1967, 10045
- Stewart Flat quadrangle, Idaho, geology, 11162
- Stewarts disease, *see* Wilt disease.
- Steyskal, George C., flies captured in treetops in Malaya, 5313
- Stichman, Eugene P., transcriber confidence in relation to accuracy of transcription, 5751
- Stiefel, E., regularization for computing orbits in celestial mechanics, 12857
- Stiffeners (aircraft):
 - edge-stiffened rectangular plate subjected to boundary loads, etc., plane-stress analysis, 16895
- Stiffner, J. J., telecommunications, 6731

- Stiffness, matrix solution for shells of revolution possessing variable thickness heat protection, 11514
- Still-birth:
- fetal death registration—
 - funeral directors' handbook, 17142
 - hospital handbook, 11737
 - medical examiners' and coroners' handbook, 15695
 - physicians' handbook, 13088
- Stilling basins:
- Howard Hanson Dam, Green River, Wash., hydraulic model investigation, 2201
 - lower Monumental Dam, Snake River, Wash., hydraulic model investigation, 10949
- Stimulants:
- bibliography, fact sheet, 14073
 - fact sheet, 12558
- Stimulus, unilateral caloric stimulation of labyrinth, auto- and cross-correlation of following, 71
- Stings (aircraft):
- support interference on aerodynamic characteristics of cargo-type models, 12938
- Stipends:
- mental health trainee stipends, institutions offering, 11760
 - psychiatric-mental health trainee stipends for nurses, availability, etc., 10058
- Stipp, Henry E.:
- mineral industry of—
 - Angola, Mozambique, and Portuguese Guinea, 9758
 - Basutoland, Bechuanaland and Swaziland, 11357
 - Congo (Leopoldville), 12800
 - Gabon, 8348
 - Guinea, 8354
 - Ivory Coast, 8354
 - Sierra Leone, 2564
 - Sudan, 8365
 - Tunisia, 6668
- Stivers, Louis S. Jr., optimum body shapes at hypersonic speeds, 18024
- Stock catalogs, *see* Catalogs—Government supplies.
- Stock exchanges, transactions, statistical series releases, SEC, 3501
- Stock ranges, *see* Range lands.
- Stocker, Joseph, *se habla espanol*, help for Spanish speaking youngsters, 13964
- Stockholders:
- bank stock ownership and control, staff report, 4528
 - print additional copies, report, 13654
 - personal liability on land bank loans, report, 15130
- Stockholm, Sweden, U.S. trade center, 12654
- Stockpiling, *see* Strategic materials.
- Stocks:
- bonus plans, income tax, laws and regulations, 9596
 - registered on national securities exchange list, 11051
 - United States Army in Europe, availability for requirements of other commands Army Dept., GAO review, 8140
 - see also* Securities.
- Stockyards:
- packers and stockyards act—
 - amend, hearings, 13691
 - applicable to auction markets, 15870
 - recordkeeping for livestock dealers, 44
 - what it is, how it operates, 15866
 - packers and stockyards resume, 3672, 13042
- Stoeckeler, Joseph H.:
- seedbed density affects size of 3-0 green ash nursery stock, 14095
 - wetland road crossings, drainage problems and timber damage, 14097
- STOL (short takeoff and landing), *see* Aircraft—Airplanes.
- Stomatology, Rumanian national congress, proceedings, 12732
- Stomatopoda, *see* Crustaceans.
- Stone, Alan, new species of diptera from Dominica, 6962
- Stone, Hubert L., cardiac output, etc., of miniature swine, 4186
- Stone, James E., pressure drop and heat transfer for water boiling in single-tube heat exchanger, 14463
- Stone, minerals yearbook chapter, 5134
- Stonemason, *see* Masons.
- Stoner, John E., interlocal governmental cooperation, study of 5 States, 13942
- Stoop, J., effect of nitrogen on tensile and creep-rupture properties of niobium, 10000
- STOP, computer program for supersonic transport trajectory optimization, 11415
- STOPS (shipboard toxicological operational protective system):
- BW decontamination with hypochlorite, application, exploratory studies, 10012
- Storage:
- Army technical manual, change, 7402
 - industrial plant equipment, quality assurance program, 13912
 - open areas—
 - flexible pavement design, emergency construction, Army technical manual, 10277
 - military installations, emergency construction, general provisions and geometric design, technical manual, 5742
 - pumped, for hydroelectric power, bibliography, 14707
 - radioactive wastes, solidification and long-term storage, symposium, proceedings, 5767
 - storing vegetables and fruits in basements, cellars, outbuildings, and pits, 5631
 - technical manual, 115, 14803
 - see also* names or classes of articles stored.
 - Storage batteries:
 - hermetically sealed nickel-cadmium cells protected from internal gas pressure, 6846
 - lead-acid cell—
 - operation, refractometric sensing of H_2SO_4 , specific gravity, 18112
 - plate materials, anodic oxidation of $PbSO_4$, etc., 11672
 - tubular type battery plates micrography, 8591
 - Storage in major power reservoirs in Columbia River basin, 3907
- Stores:
- department stores—
 - credit, monthly report, 3200
 - inventory price indexes, 6614, 16823
 - leased departments, census of business, 1963, retail trade, 5816
 - sales—
 - by departments, monthly report, 3572
 - selected areas, monthly report, 3573
 - selected cities and areas, monthly report, 3574
 - selected cities and areas, weekly percentage changes, 4057
 - food, voluntary and cooperative food chains, bibliography, 10077
 - Government bookstores, locations in Washington, D.C. area, 5412
 - grocery department operations, commissary stores, technical manual, change, 7396
 - location, bibliography, 1600
 - retail—
 - advertising, bibliography, 5494
 - food, packaging and price marking meat and poultry, systems and equipment, 7276
 - food stores, bibliography, 7112
 - grocery store companies, mergers and acquisitions, 2172
 - hardware, bibliography, 7113
 - sales, current reports, 3172
 - annual statistics, 17439

INDEX 1967

Stores—Continued

- small—
 - planning for growth, 2857
 - recordkeeping systems, bibliography, 2856
- Storey, C. L., comparative study of methods of distributing methyl bromide in flat storages of wheat, gravity-penetration, single-pass, and closed-recirculation, 15861
- Storms:
 - coastal warning facilities charts—
 - Canadian border to Eureka, Calif. and Alaska, 14717
 - Cape Hatteras, N.C. to Brunswick, Ga., 14718
 - eastern Florida, 8790
 - Eastport, Maine to Montauk Point, N.Y., 14719
 - Eureka to Point Conception, Calif., 11901
 - Hawaiian Islands, 11902
 - Manasquan, N.J. to Cape Hatteras, N.C. and Chesapeake Bay, 14720
 - Montauk Point, N.Y. to Manasquan, N.J., 14721
 - Morgan City, La. to Brownsville, Tex., 11903
 - Point Conception, Calif. to Mexican border, 11904
 - Puerto Rico and Virgin Islands, 11905
 - Colorado, hydrologic performance of flood-water retarding structures, 14651
 - data, monthly, 3908
 - severe-storm forecasting procedures of Military Weather Warning Center, analysis, notes, 17339
 - small craft, gale and whole gale warning facilities chart, Great Lakes—
 - Huron, Erie, and Ontario, 14723
 - Superior and Michigan, 14724
 - tropical, Gulf Coast, frequency distribution of rainfall (paper), 5593
 - winter storms, general information, 17739
 - see also Hurricanes—Magnetic storms—Snowstorms—Thunderstorms.
- Story of cotton, 15858
- Stotelmeyer, R. B., mineral industry of South Dakota, 5120
- Stough, Ada B., rural county cares for its aging, 4082
- Stowage, metal tube can be folded for compact stowage, is self-erecting, 1452
- Stowe, Agnes C., relief, 7659, 10478, 10707
- Strachan, John R., appointment as Postmaster of New York, swearing-in ceremony (remarks), 14610
- Strain gages:
 - circuity provides fatigue testing machine with accurate cycle count, 11391
 - pressure transducers, life cycling test, 18083
 - spiral spring/strain gage combination accurately measures shock induced deflection, 1468
- Strains and stresses:
 - aluminum alloys, treatment increases stress-corrosion resistance, 6760
 - bending of circular plates confining incompressible liquid, 97
 - biaxially stressed D-43 alloy with refluxing, potassium, compatibility, 11422
 - biaxial stresses in cylinders produced by single-source mechanical loading system, 17990
 - buckling—
 - load of truncated conical shells, influence of prebuckling deformation, 5187
 - pressurized toroidal ring under uniform, external loading, 15570
 - prestressed shells of revolution, 6878
 - sandwich and ring-stiffened 120° conical shells subjected to external pressure, effect of edge constraint, 11417
 - burst-prone coal pillars, stress distributions, 12824

Strains and stresses—Continued

- cellular structures as load-bearing structural elements, Hungarian study, 4956
- composite structures, analyses, 2602
- controlled release device prevents damage from dynamic stresses, 6790
- copper alloys, failure under microimpact action, rules governing, 12714
- crackline-loaded edge-crack specimens, stress intensity factors, 6869
- cumulative fatigue, application of double linear damage rule, 9875
- cylinders, thin walled, radial displacements, 17947
- deep mine stress determinations using flat-jack and borehole deformation methods, 6676
- destructive sectioning of complex structures for examination, 6833
- discrete-element methods for plastic analysis of structures, 17933
- dislocation structures in slightly strained tungsten and alloys, 14486
- duality between problems of stretching and bending of plates, 5186
- edge loadings on vibration of rectangular plates with various boundary conditions, errata, 12919
- effect of explosions on snow structures, 99
- elastic structures, analog circuits, 5169
- ellipsoid stress determination in rock-burst prone area at 4,000 foot depth, Galena mine, Wallace, Idaho, 14351
- embedment stresses in electronic modules, use of transducer to measure, 17978
- empirical equation relating fatigue limit and mean stress, 9878
- epoxy resins, microparticle and fiber reinforcement, 5352
- fatigue—
 - aircraft structures, 17062
 - behavior of simulated wing structure under environment of supersonic transport, 16905
 - crack growth in Ti-8Al-1Mo-IV (duplex-annealed) specimens having various widths, investigation, 8494
 - cryogenic, data developed for Inconel 718, 8472
 - equipment and techniques for complex loading, 5748
 - gears with integral teeth, high energy rate system evaluation, 8898
 - initial load and exposure to moderately elevated temperature effect on room-temperature fatigue life of Ti-8Al-1Mo-IV titanium alloy sheet, 14464
 - life, and bearing torque studies with several lubricants, 11509
 - life under random loading for power spectral shapes, 17013
 - low cycle, of notched specimens by consideration of crack initiation and propagation, 12921
 - rolling element fatigue life of SAE 52100 steel hollow balls, 6879
 - stainless steel, type 316, and Inconel X, high temperature vacuum fatigue testing with resonance-type machine, 11676
 - zones in metals identified by polarized light photography, 9846
- isotopic X-ray sources for portable stress analysis equipment, feasibility, 14809
- jacketed cryogenic piping is stress relieved, 15553
- laboratory stress-deformation characteristics of soils under static loading, 2596
- metallic materials and elements for aerospace vehicle structures, military handbook, 7860, 9370
- photosensitive filler minimize internal stresses in epoxy resins, 14429
- plane elasticity, integral equation method, 9819

Strains and stresses—Continued

- plane-stress—
 - analysis of edge-stiffened rectangular plate subjected to loads, etc., 16895
 - elastic-plastic states in vicinity of crack tips, 9816
- plastic buckling of axially compressed eccentrically stiffened cylinders, 5249
- plastic constraint ahead of sharp crack under plane-strain conditions, 7108
- post-stressed concrete foundation may reduce machinery vibration, 15489
- residual strains and displacements within plastic zone ahead of a crack, 5489
- results from full-scale measurements of midship bending stresses on 2 dry-cargo ships, 10076
- rock outcrops near Atlanta, Ga., 1409
- rock stress determinations, anisotropic considerations, 12818
- rotor air loads, blade motion and stress caused by transient inputs of shaft torque as related to stoppable rotor operation, 13308
- strain gage circuitry provides fatigue testing machine with accurate cycle count, 11391
- stress and wave patterns in soils subjected to dynamic loads, 10235
- stress calculator speedily converts data, 12908
- stress-corrosion cracking of Ti-6Al-4V alloy in methanol, 6900
- stress corrosion cracks in titanium alloys revealed by chemical milling solution, 16957
- stress distribution near explosively expanded rock bolt anchors, 5126
- stress distributions in vicinity of simulated crack, photoelasto-plastic method to study, 8406
- stress in rock, 3-component borehole deformation gage for determining, 15481
- stress rupture and creep properties of tungsten-fiber-reinforced copper composites, 17002
- stresses and displacements surrounding open pit in gravity-loaded rock, 14356
- stresses at tip of longitudinal crack in plate strip, 14498
- structural efficiency of ring-stiffened corrugated cylinders in axial compression, 14470
- structural optimization with probability of failure constraint, 5252
- structural vibrations, interaction with sound fields, 9835
- structures and power sources, surface-to-air missile series, engineering design handbook, 15928
- tensile and creep-rupture properties of niobium, nitrogen effect, 10000
- tensile strength—
 - discontinuous-fiber composites, metallurgical and geometrical factors affecting, 8498, 14451
 - effect on current-carrying capacity of commercial superconductors, 2719
 - horizontal machine for testing structural wood elements in tension, 8062
 - microvoids in glass-filament-wound structures, measurement, minimization, and correlation with interlaminar shear strength, 11677
- tensile yield strength using least number of specimens, simplified method measures changes, 16879
- thermal bending plus twist of thin-walled cylinder of open section with application to gravity gradient booms, 15561
- titanium alloys, salt water stress-corrosion, cracking characteristics, 17091
- titanium, degreasing to minimize stress corrosion, 11476
- titanium tanks, glass bead shot peening retards stress corrosion failure, 14413

Strains and stresses—Continued

- torsion-effusion technique to investigate thermodynamic properties of alloys, 17923
- weak turbulence and heat transfer with uniform normal strain, 5254
- Strand, Edwin G., commercial cotton farms, 986
- STRATCOM, see Army Strategic Communications Command.
- Strategic materials:
 - defense materials systems—
 - and priorities, questions and answers, 7452
 - monograph, Industrial College of Armed Forces, 9608
- disposal of battery grade synthetic manganese dioxide from national stockpile—
 - law, 439
 - reports, 684, 921
- disposal of bismuth from national and supplemental stockpiles, report, 14938
- disposal of fused crude aluminum oxide from national and supplemental stockpiles—
 - law, 437
 - reports, 685, 922
- disposal of industrial diamond stones from national and supplemental stockpiles—
 - law, 436
 - reports, 683, 920
- disposal of molybdenum from national stockpile, report, 14936
- disposal of nickel from national stockpile—
 - hearings, 722, 7738, 10808
 - law, 453
 - reports, 687, 936, 9117
- disposal of rare-earth materials from national and supplemental stockpiles, report, 14937
- Federal stockpile inventories, report, 2986
- mobilization programs of—
 - Business and Defense Services Administration, hearing, 13543
 - General Service Administration, hearing, 12186
 - Interior Department, hearing, 14916
- stockpile contracts for diamonds, balance-of-payments aspects, GAO report, 15293
- stockpile program, relationship to domestic mining industry, hearings, 2051
- stockpile reports, 4725, 9416
- transfer of silver by Treasury to national stockpile—
 - law, 12171
 - reports, 10602, 10765, 12248
- Strategy, see Military art and science.
- Strategy for livable environment, 12622
- Stratification:
 - density, and water masses, western north Atlantic Ocean, atlas, 11629
 - elimination at Lake Cachuma, Calif., progress report, 11183
- Stratigraphy:
 - bedded barite in East Northumberland Canyon, Nye County, Nev., 16689
 - Cambrian and Ordovician rocks of east-central Alaska, 6404
 - Charlot site vicinity, Lisburne Peninsula, northwestern Alaska, 8162
 - contributions to stratigraphy (series), 1112-13, 2361, 6393-95, 11168, 12602, 14169, 17820
 - Cretaceous and lower Tertiary, in west-central Puerto Rico, 17820
 - Gulf Series, subsurface in northern Florida and southern Georgia, 16692
 - Independence quadrangle, Inyo County, Calif., Paleozoic formations, 2364
 - Keku Islets and neighboring parts of Kulu and Kupreanof Islands, southeastern Alaska, 12600

INDEX 1967

Stratigraphy—Continued

- lower Paleozoic paleontology and stratigraphy of east-central Alaska (series), 6404
- Middle Ordovician brachiopods and trilobites from basin ranges, western U.S., 11174
- stratigraphic analysis of deep ice core from Greenland, 13290
- tertiary biostratigraphy of Cook Inlet region, Alaska (series), 2365
- Upper Silurian and Lower Devonian strata of northeastern Pennsylvania, New Jersey, and southeasternmost New York, 11167
- Stratosphere, upper, temperature, pressure, density, and wind measurements, 17012
- Straw, baled, sampling tool to extract cores, 13201
- Strawberries:
 - California, air transport factors affecting market quality, 1966 spring shipments, 1704
 - culture, south Atlantic, etc., regions, 1685
 - fresh market, acreage, production, etc., 1959-65 revised estimates, 14762
 - insects, control, 10167
 - varieties in U.S., general information, 17309
- Streams, *see* Rivers.
- Streets, District of Columbia, use of air-spaces, in, on, over, and under, hearings, 16407, 17598
 - see also* Roads and highways.
- Strength of a sparrow (address), 16312
- Strength of materials, scientific bases, 1965, USSR research, 2453
 - see also* names of materials and articles.
- Strengthening community services in low-income neighborhoods, 17840
- Streptomyces. *Streptomyces griseus* (Kralnsky) Waksman and Henrich, taxonomic study of some strains, 54
- Stress (physiology):
 - dynamic stress testing, biomedical monitoring—
 - Flack test, 7360
 - instrumentation and normal values, 7343
 - Levy hypoxia test, 7344
 - maximum exercise tolerances, ergometer, 7361
 - tilt table orthostatic tolerance test, 7362
- Stress (psychological), *see* Tension.
- Stresses (mechanical), *see* Strains and stresses.
- Stretchers, orthopedic, with average-sized person can pass through 18-inch opening, 5222
- Strikes and lockouts:
 - airline dispute, providing for settlement, hearings, 959
 - Federal legislation to end, documentary history, 10861
 - operation hygrade, anatomy of shutdown, 13972
- railway disputes—
 - extend period for no change under sec. 10 of railway labor act—
 - laws, 9040, 10482
 - reports, 9112, 9279, 10567
 - negotiations to ward off strike, etc.—
 - message from the President, 9074
 - status, hearing, 9328
 - settlement—
 - hearings, 10660, 10868
 - law, 13534
 - reports, 12259, 12267, 12364, 13667
 - summary of situation, etc., message from the President, 10514
 - work stoppages—
 - analysis, 5060
 - U.S. missile sites, 5403, 18141
 - final tabulations, 14307
 - Government employees, 14308
 - monthly, 4070

- Stringfield, V. T., artesian water in Tertiary limestone in Southeastern States, 6399
- Strip-mined lands, *see* Reclamation of land.
- Strip mines, *see* Coal lands.
- Striped bass, *see* Bass.
- Strips (metal, etc.):
 - calibrating ultrasonic test equipment for checking thin metal strip stock, 12832
 - strip chart recorder time notation, technique, 12912
- Strishkov, V. V., mineral industry of U.S.S.R., 15470
- Strobridge, Truman R., brief history of 9th Marines, 17904
- Strokes:
 - cerebrovascular disorders, 18176
 - characteristics of clients rehabilitated, 7221
 - epidemiology, study, 11726
 - regional medical programs, guidelines, 13076
- Strom, Thomas N., wear and friction of impregnated mechanical carbons, 9915
- Strommen, Norton D., climates of States, Michigan, 16530
- Strong, D. R., pressure fluctuations on flat plate with oblique jet impingement, 14388
- Strontium fluoride, ionic conductivity, 6866
- Strontium isotopes:
 - Sr-85, distribution in freshwater ponds, 15681
 - Sr-90—
 - determination in water, 6410
 - Quehanna pilot plant first generation process operations, 5777
- Stroud, C. W., heating rates from thick-calorimeter data, 5496
- Stroud, Lowell, isotopic abundance of neon, etc., in natural gases rel. to helium genesis, 9785
- Stroud, Raymond B., mineral industry of Arkansas, 6644
- Struble, George R., mountain pine beetle, 17793
- Structural adhesives, *see* Adhesives.
- Structural analysis and matrix interpretive system (SAMIS), 12899
- Structural designs, *see* Architecture—Designs (Industrial)—Materials.
- Structural models, *see* Models (structural).
- Structural optimization with probability of failure constraint, 5252
- Structural steel, *see* Steel.
- Structural unemployment, *see* Unemployed.
- Structures, *see* Buildings—Earthwork and structures—Strains and stresses.
- Strunk, Hazel L. S., relief, 578
- Struts (aircraft):
 - combustion chamber struts can be effectively transpiration cooled, 6805
- Strymonini, *see* Butterflies.
- Stuart, A. H., United States trade in jewel bearings, etc., 12030
- Stuart, Wilbur T., Swatara Creek basin of southeastern Pennsylvania, evaluation of its hydrologic system, 16703
- Stuart, Fla., motor carrier accident, 17917
- Stubbs, Sandy M.:
 - landing characteristics of dynamic model of HL-10 manned lifting entry vehicle, 2685
 - water pressures and accelerations encountered during landings of Apollo spacecraft, 16970
- Student or classroom science project series, 4135-37
- Student reference, Department of Labor safety training programs, SR LS series, 6602, 9731-32
- Student Work Experience and Training, program sponsored by Mental Retardation Branch, Public Health Service, 7060
- Students:
 - advance training in Peace Corps, program for college juniors, 5373
 - career opportunities in SCS, 1705

Students—Continued

certification requirements for school pupil personnel workers, 9396
college—
aids, loans, grants, etc., 2177
career opportunities in Public Health Service through Commissioned Officer Student Training and External Program, 10043
how Education Office assists, 4712
college, work study program, amend law—
law, 17536
reports, 14952, 14959, 15125
correspondence exchange on Viet-Nam, 7143
educational scholarships, loans, and financial aids, 1
employment, full-time, at special minimum wages, 7229, 18251
entering U.S. from developing countries, authorize study of failure to return home, law, 412
faculty listens to students' evaluation of Lake Oswego High School, 17726
financial aid for postsecondary education through establishment of Educational Opportunity Bank, panel report, 15663
foreign, in United States, national survey, 5613
full-time, ages 18-21, amend railroad retirement act to provide survivor benefits, law, 414
graduate students—
academic & financial status, 17715
aids, loans, grants, etc., 2177
in Peace Corps, 5376
grouping as related to learning, survey of research, 4721
high school, national ability counts contest, 1968, announcement, 15667
higher education act of 1965—
administration of programs, 1966, notes and working papers, 12422
student loan program, 6% payment tables and amortization schedules, 7910
Lincoln Center's student program opens new world to teenagers, 12465
loans—
health professions, program 5435, 17149
increase credit life, health, or accident amounts allowable in D.C., report, 882
national defense education act, college work-study program and list of participating institutions, 1001
program for medical, osteopathic, dental, etc., and nursing students, law, 463
program, nursing student, information, 11747
Negro, enrollment in Southern and border States, 4711
occupational therapy, four educational opportunities, 8899
postgraduate students at Voronezh State University, living and study conditions, 4954
public elementary and secondary day schools, statistics, 7896
social security benefits for students 18-22, cash, 5512
student composers take over, sonata for 2 clarinets, 7911
student manual, SM series, 1905, 7528, 13427-432, 14846, 16056-57
summer jobs and how to find them, 10947
undergraduate training grants awarded by National Institute of Mental Health, 7066
vacation work-study positions, examination announcement, 214
vacation work-study programs in engineering and physical sciences, examination announcement, 17460
vocationals, aids, loans, grants, etc., 2177

Students—Continued

vocational student loan insurance act of 1965—
amend, hearings, 15026
eligible institutions, list, 2181
supplement, 6181
6% payment tables and amortization schedules, 7910
see also Reserve Officers Training Corps, Army.
Studies (North Vietnam periodical) :
translation, 3945
Studs, see Lumber.
Studd, Elliot, reentry of offender into community, 8791
Study, see Curriculum.
Stump sprouting of 4 northern hardwoods, 8111
Stumpage, see Timber.
Sturas, Jonas, I., photographic study of mercury droplet parameters including effects of gravity, 1509
Sturm, Herman M., technology and manpower in health service industry, 11297
Sturm, Thomas A., USAF Scientific Advisory Board, its first 20 years, 11969
Sturman, John C., improved micropower logic circuits, 14461
Stutts, Jesse W., Jr., relief, 608, 13587, 17498
Stuve, John M., heats of formation of yttrium and thulium trichlorides, 6683
Stygones, see Amphipods.
Style manual:
Government Printing Office—
abridged edition, 11193
revised edition, 9577
Styles, Kathleen, relief, 792, 10708
Suarez, Pablo A., relief, 9210
Suarez, Rafael F., relief, 10542, 13512, 13760
Suarez-Diaz, Jose C., relief, 10709
Suarez Tejon, Virginia, see Tejon, Virginia S.
Subalpine fir, see Fir.
Subarctic regions :
emergency construction, surface drainage design for airfields and heliports, 7395
temperature inversions survey, 4200
Subcontracts, see Government contracts.
Subgravity, see Gravity.
Subin, Harry I., criminal justice in metropolitan court, 1348
Subject headings :
agricultural/biological vocabulary—
alphabetical list, 17026
categorized list, 17025
Atomic Energy Commission, nuclear science abstracts—
indexes, 128
subject scope, 7427
Library of Congress, 3910
medical, 3407
cumulated, 6940
technical thesaurus, manual for building, 4677
water resources thesaurus, 2398
Sublimation :
method for preservation of foodstuffs, USSR study, 12665
subliming solid control rocket—
phase 1, 8412
phase 2, development, 8413
Submarine boats :
engineering administration, training aid, 11664
nuclear powered—
atmosphere purification and control, status of chemical research, 17084
propulsion equipment, procurement under Public Law 87-653, by Navy Dept., GAO report, 16674
safety measures for paint, fire-retardant undercoat influence on burning characteristics of combustible topcoat, 13036
Thresher, civilians who lost their lives, furnish memorial headstones or markers, hearing, 715

INDEX 1967

Submarine cables :
composition and laying, USSR study, 15372
underwater cable design, USSR study, 15387

Submarine crew, blood clotting studies, serial analysis of clotting mechanism during prolonged submergence, 12790

Submarine geology, Alaska research studies, engineering seismology, 12117

Submarine Medical Center, *see* Naval Submarine Medical Center.

Submarine Medical Research Laboratory, color vision test, Farnsworth Lantern, 1955-65 performance record, 16845

Submarine medicine, *see* Medicine.

Submarine mountains, *see* Seamounts.

Submarine warfare, undersea warfare laboratory, Los Alamitos, Calif., proposal, subcommittee report and hearings, 13698

Submariners, acuity and phoria among, longitudinal study, 12791

Submarine, *see* Submarine boats.

Subminiature deflection circuit operates integrated sweep circuits in TV camera, 11479

Subsidies :
air transportation industry (talk), 7519
large family-rent subsidy demonstration program, report, 5295
see also names of commodities, industries, etc.

Subsistence :
Federal item identification guides for supply cataloging, supplements, 3290
special commodity quality assurance information handbook, 10887

Substrates :
gage accurately controls force for placing chips on substrates, 6832
mechanism, protection of enolase and lactic dehydrogenase against ionizing radiation, studies, 14774
oxide film on metal substrate reduced to form metal-oxide-metal layer structure, 12841

Suburban and farm vegetable gardens, 8831

Suburbanites, publications, list, 8206

Suburbs :
busing school kids to suburbs, 10928
land-use crisis in suburbia, picture story, 11939

Subversive activities, *see* Un-American activities.

Subversive Activities Control Board :
annual report, 5562
appropriations, 1967, law, 501
appropriations, 1968—
hearings, 10632, 16390
reports, 10616, 16372
registration of Communist organizations, etc., amend law, report, 16290
reports, index-digest, 5563

Success [for Negro Americans in field of employment], 15223

Succotash, canned, U.S. standards for grades, 13892

Suchecka, Zofia, *see* Soliwoda, Sophia.

Sudan :
agricultural commodities, agreement, 2889
capsule facts for Armed Forces, 13283
labor conditions, 2516
mineral industry, minerals yearbook chapter, 8365

Suddath, Jerrold H., linearized error analysis of onboard primary navigation systems for Apollo lunar module, 15556

Suez Canal, sailing directions, 9071

Suffix codes for jobs defined in dictionary of occupational titles, 3d edition, 9417, 10946

Suffolk County, Mass., Norwood quadrangle, geology, 6389

Suffren (frigate) :
French, propulsion and power production, 9670

Sugar :
act of 1948, as amended, 1967 wage requirements, 8844
Spanish edition, 8845
classification definitions, 18123
determinations of wage rates, prices, acreage credit, etc., 3911
foreign agriculture circulars, 3345
international agreement of 1958, protocol, prolongation, text, 2885, 9186
monosaccharides, etc., occurrence, preparation, and properties, 18081
payments and quotas, statutes, compilation, 7262
requirements and quotas, 3912
sugar reports, monthly, 3913
U.S. program, including sugar act amendments of 1965, 5621

Sugar pine, *see* Pine.

Sugarcane, area of Louisiana, alluvial soil, deep-tillage investigations, 1672

Sugluchi, Howard, study of vibration of concrete, 13955

Suglura, Masahisa, provisionally hourly values of equatorial Dst (storm time variation), 14459

Suicide :
bulletin of suicidology, 14617
tragedy of suicide in U.S. (talk), 8655
United States, 1950-64, study of statistics showing trends, etc., 17171

Sulfates, *see* Lithium sulfate.

Sulphydryls, dog plasma sulphydryl groups, effect of oxygen, 5712

Sulfides :
cyclic, synthesis, 12823
massive deposits of Appalachians, 15310

Sulfonates :
oil, solubilizing effect of cation and applicability of mass law, 17095
polystyrenesulfonate model membranes, polymer structure and ionic transport, 9592

Sulfur :
carbon disulfide bench-scale production, 5127
compound characterization studies on high-boiling petroleum fractions, 2583
foam, low density, preparation of, 17379
minerals yearbook chapter, 6692
native and recovered, mineral industry survey, monthly, 3914
production, etc., 1966, preliminary, 5135

Sulfur dioxide, removing from hot flue gases, process development, 12831

Sulfur oxides, air quality criteria, 11715

Sulfuric acid :
current industrial reports, 4342, 13396
specific gravity, refractometric sensing in lead-acid cell operation, 18112

Sulky project, *see* Project Sulky (plow-share program).

Sullivan, David, labor's role in war on poverty, 11299

Sullivan, John B., childbearing and diabetes mellitus, 1960-62, United States, 5469

Sullivan, Robert E., Monte Carlo program for calculation of Doppler coefficients, 18030

Sullivan, Timothy L. :
continuity gage measurement of crack growth on flat and curved surfaces at cryogenic temperatures, 2721
uniaxial and biaxial fracture toughness of titanium alloy sheet, 11552

Sumatra, sailing directions, change, 14576

Summer, L., coating implements with material supply, classification definitions, 18134

Summer education for children of poverty, 4720

Summer jobs for students and how to find them, 10947

Summer jobs in Federal agencies, 1928

Summer schools, *see* Schools.

Summers, R. L., experimental evaluation of techniques for improving fallout protection in home basements, 5765

- Summersville Dam, construction bids, quantity estimates prepared for solicitation, GAO review, 14152
- Sun, Fang T., optimum transfer between 2 terminal points for minimum initial impulse under arbitrary initial velocity vector, 1427
- Sun :
anatomy of the sun, 14370
coronal photographs, isophotes, and flash spectrum from eclipse, 11551
ephemeris, 17902
low-thrust orbit raising in continuous sunlight while thrusting in plane perpendicular to earth-sun line, 15567
solar activity and life processes, USSR study, 1213
solar-geophysical data (periodical), 10969
solar orbit, unguided solid fuel rocket vehicle, feasibility, parametric design, and analysis, 12853
solar X-ray spectrum reproduced in vacuum, 12895
see also headings beginning Solar.
- Sundahl, William E., slash and litter weight after clearcut logging in 2 young-growth timber stands, 8087
- Sunnyside Seed Farms, relief, 358, 619
- Sunset Cliffs :
San Diego, Calif., beach erosion study, engineer report—
departmental edition, 1029
document edition, 521
- Sunset Crater National Monument, general information, 8563
- Superconductivity :
mechanisms, investigated by nuclear radiation, 9830
niobium, ultrasonic attenuation, 5273
simple technique determines ac properties of hard superconductive materials, 6817
torus in nonaxial uniform magnetic field, potential and magnetic moment, 9986
- Superconductors :
commercial, effect of tensile stress on current-carrying capacity, 2710
performance of superconducting magnets, effect of mechanical vibrations, 11511
- Supergrade positions, *see* Civil service.
- Superheaters :
BONUS, boiling nuclear superheater power station final hazards summary report, 5784
nuclear reactor, corrosion resistance of stainless steel and nickel alloys, 9797
nuclear superheat project, final report, 5773
- Superheterodyne receivers, *see* Receivers (radio).
- Superintendent of large public school systems, 6197
- Superior, Lake :
iron resources, 6678, 14346
small craft, gale and whole gale warning facilities chart, 14724
- Superphosphates, *see* Phosphates.
- Supersonic aerodynamics, *see* Aerodynamics.
- Supersonic aircraft, *see* Aircraft.
- Supersonic airplanes, *see* Airplanes.
- Supersonic flow, *see* Flow.
- Supersonic inlets, *see* Air inlets (aircraft).
- Supervisors :
don't guess! ask your security supervisor, poster, 13927
supervisory responsibility for safety, 9717, 16808
- Supplemental appropriations and estimates, *see* Appropriations.
- Supplementary Medical Insurance Trust Fund, *see* Board of Trustees of Federal Supplementary Medical Insurance Trust Fund.
- Supplies, *see* Agricultural supplies—Dental supplies—Government supplies—Hospital apparatus and supplies—Medical supplies—Military supplies.
- Supply and demand :
demand and price situation, 3197
forest products, 5660
farm products, Saudi Arabia, projections to 1975 with implications for U.S. exports, 7836
long term forecasts of agricultural and livestock products in Venezuela, summary and evaluation, 12456
Supply catalogs, *see* Federal supply catalogs.
- Supply Corps, Navy, *see* Navy Supply Corps.
- Supply management and control over expendable supplies and materials, Architect of Capitol, GAO review, 14161, 15057
- Supplying the Navy, 13029
- Support service contracts, hearing, 16330
- Supports, sting-support interference on aerodynamic characteristics of airplane models, 12938
- Suppressors (electric) :
basic suppression techniques, evaluated, 1451
- Supreme Court :
Associate Justice, nomination of Thurgood Marshall—
hearings, 13876
report, 15062
cases adjudged—
Court of Claims cases, 970, 2142, 4663—
64, 7840, 12436, 16453, 17686
official reports, 3652
United States reports, 1645, 2941, 7201
journal, 3924
manuscript and revised printed opinions in National Archives, index, 14512
uniform civil appellate rules for courts of appeals, power to prescribe, law, 477
upsets tradition by recent decisions, 6052
- Surface active agents :
influence on properties of air bubbles at air/sea interface, 17088
liquid structure, effect on contact angle hysteresis, 9987
viscosity of polydimethylsiloxane monolayers, 8592
- Surface mining, *see* Mines and mining.
- Surface motion measurements, *see* Surfaces.
- Surface tension :
critical, for spreading on liquid substrate, 10006
effect of adsorbed water upon spreading of organic liquids on soda-lime glass, 18110
Surface water, *see* Water.
- Surfaces :
areas, radioactive method, determines, 6702
chemical analysis by using alpha particle backscattering measurements, 12840
complex, plated by thin-film deposition in one operation, 8447
coplanarity, measuring, 17982
curved, free jet impingement in vacuum, 9897
flat and curved, crack growth at cryogenic temperatures, continuity gauge measurement, 2721
formed concrete, reducing size and number of voids, methods, 16529
liquid, motion in response to lateral acceleration during weightlessness, 12966
preparations improve thermionic emission, 2633
roughness, statistical technique for dynamic analysis of vehicles traversing rough yielding and non-yielding surfaces, 8407
safe working, safety in industry instructor outline, 8294
softwood, ultraviolet irradiated and weathered, microscopic observations, 14123
surface effects in photodegradation of polymer films, 18113
zero, determining depth, USSR study, 4952
Surgeon General, Army, *see* Army Medical Service.

INDEX 1967

- Surgeon General, Public Health Service, *see* Public Health Service.
- Surgery:
emergency war surgery, NATO handbook, Spanish edition, 9366
ovarian cancer, surgical treatment combined with application of radiogold, 5031
plastic, of joints, preparation, preservation, and use of bones, USSR study, 15347
Surgical instruments and apparatus, new stainless steels, USSR study, 6517
Surgical supplies, hospital central services, manual, 1579
Surinam:
economy, basic data, 16103
foreign trade regulations, 4441, 12134
mineral industry, minerals yearbook chapter, 8366
Surplus property:
care and handling functions of excess real and related personal property, GSA to assume, report, 13794
defense disposal manual, change, 6146, 7553-54, 9368, 10890
excess property, control and use, etc., following U.S. military exclusion from France, hearings, 16327
material available for science education, 14186
State agencies, directors, directory, 8188 *see also* Personal property.
Surplus Property Utilization Office, HEW, regional representatives, directory, 8188
Survey, Stanley S.;
remarks—
Feb. 23, 1967, 7215
Mar. 9, 1967, 8769
Apr. 29, 1967, 10117
May 5, 1967, 10125
May 11, 1967, 10123
June 20, 1967, 13165
Surveillance (military):
teams, use in image interpretation, information exchange, confidence, and resolving disagreement, 5752
Survey meters, *see* Radiation detection instruments.
Survey of current business (periodical), 3925
Surveying:
aid, examination announcement, discontinuance notice, 7544
geodetic, activities within Federal Government, GAO review, 6382
publications, price list, 17134
seasonal employment information, 2524
Surveyor Project, *see* Project Surveyor (unmanned lunar exploration).
Surveyors, surveying technician, examination announcement, 13445
Surveys, *see* Community surveys—*also* subjects of surveys.
Survival:
Air Force manual, 10209
aircrew survival equipmentman (PR) 3 & 2 and (PR) 1 & C, supplement, 11652
crash survival, aircraft design guide, 13300
differential games, generalized solution, USSR study, 14253
family food stockpile, 16397
knowledge for survival, Extension's rural civil defense program, 3463
personal and family—
civil defense adult education course, student manual, 1905
survival course, announcement, 16507
shelters, sensible and latent heat losses from occupants, 7092
Survivor insurance, *see* Old-age, survivors, disability and health insurance.
Survivors, *see* Civil service pensions.
Survivors' benefits:
Foreign Service retirement and disability system, increases and adjustments, report, 13795
Survivors' benefits—Continued
guide for next of kin of Air Force casualties, personal affairs pamphlet, 13259
social security, rights and responsibilities of recipients, 7133
Survivors insurance, social security rulings, 2872, 3881
see also Old-age, survivors, and disability insurance.
Susceptor cups, tungsten insulated for induction furnace, eliminates contamination, 5211
Suter, Ann C., labor law and practice in Ethiopia, 5054
Sutherland, Harrell C., hearing of flying personnel, 17356
Sutter National Wildlife Refuge, mammals, list, 8030
Suttles, John T., ballistic reentry trajectories, 12932
Sutton, Ottilie K., psychology bibliography, 10206
Suzuki, G., quantitative methods for management, 11591
Swafford, Bill, soil survey, Garfield County, Okla., 18214
Swamp fever, *see* Anemia.
Swamplands:
acquisition for migratory waterfowl, extend act—
hearing, 10665
report, 12265
wetland road crossings, drainage problems and timber damage, 14097
Swann, Robert T., effect of composition, etc. on ablative performance of phenolic nylon, 9889
Swanson, Bruce L., statistics of farmer co-operatives, 12485
Swanson, Howard E., standard X-ray diffraction powder patterns, 15591
Swanson, Robert H., low-cost instrument to measure temperature or resistance accurately, 11127
Swanson, Rowena W., move the information, 14766
Swanson Equipment Co., relief, 9191
Swatara Creek, basin of southeastern Pennsylvania, evaluation of hydrologic system, 16703
Swaziland, *see* South Africa.
Swearingen, John J.:
evaluation of various padding materials for crash protection, 5803
injury potentials of light-aircraft instrument panels, 1826
potential decompression hazards in small pressurized aircraft, 17414
SWEAT, *see* Student Work Experience and Training.
Sweden:
air transport services, agreement, 8724
atomic energy, cooperation for civil uses, agreement, 2910
mineral industry, minerals yearbook chapter, 15469
selling in Sweden, 4445
social security system, 1608
Sweeney, John W., mineral industry of North Carolina, 5119
Sweet gum:
dormant, gibberellin-induced growth, 8093
nitrogen fertilization, 2321
site index of Delaware-Maryland stands in relation to soil characteristics, 4832
Sweet potatoes, *see* Sweetpotatoes.
Sweeteners:
markets for, 4698
noncaloric, their position in sweetener industry, 10916
Sweetfern blister rust, distribution and hosts, 4823
Sweetgum, *see* Sweet gum.
Sweetpotatoes:
acreage marketing guide, 7828

Sweetpotatoes—Continued
 acreage, yield, etc., by States and seasonal groups, 13251, 14698
 insects affecting, 15887
 planting, harvesting, marketing dates, by seasons, in principal areas, 13211
 theoretical segregation ratios of qualitatively inherited characters for hexaploid sweetpotato, 5688
Sweetwater County, Wyo.:
 improvements on lands, reimburse Wyoming—
 law, 12161
 report, 661
Sweetwater River:
 San Diego County, Calif., engineer report—
 departmental edition, 15228
 document edition, 14926
 Swenson, Lloyd S., Jr., this new ocean, history of Project Mercury, 8438
 Swerdlow, George, feasibility study of use of stannous fluoride mouthwash in school preventive dentistry program, 17352
 Swick, D. A.:
 ambiguity function independent of assumptions about bandwidth and carrier frequency, 8598
 discrete finite Fourier transforms, 15638
Swift-Train Co., relief, 13582
Swift, Calvin T.:
 input admittance of—
 coaxial transmission line opening onto flat, dielectric-covered ground plane, 16993
 rectangular waveguide-fed aperture antenna radiating into inhomogeneous lossy dielectric slab, 18028
 Swigert, Paul, Monte Carlo code for solution of planar electron-diode problems including electron-neutral elastic collisions, 15558
Swimming:
 drownproofing can save your life, 1718
 underwater sports in USSR, 6552
Swimming pools and natural bathing places, annotated bibliography, 13096
Swine:
 avian tuberculosis in hogs, costly livestock disease, 14755
 breeds, 1686
 feeder, farm building plan, 15865
 garbage-feeding, national status on control, 3599
 hog castration, general information, 5637
 hog inventory and pig crops, 1960-64, by States, revised estimates, 4147
 miniature, cardiac output, etc., 4186
 pig crop reports, 5555, 8757, 13157, 17251
 Swine plague, African, strict prophylactic measures against, Rumanian study, 15398
 Swing-out rail system separates overhead crane rails, 6704
 Switchboards, apparatus, current industrial reports, 4343
 Switches, *see* Electric switchgear—Electronic switches—Pressure switches.
 Switching time regulator circuit has increased efficiency, 12910
Switzerland:
 amateur alien radio operators, authorization to operate, agreement, 15776
 atomic energy, cooperation for civil uses, agreement, 2900
 background notes, 1620
 mineral industry, minerals yearbook chapter, 8367
 Swiss research in acids, 12733
 Swordfish, longline fishing effort and catch rates in northwestern Atlantic, 1957-65, inventory, 14063
 Sykes, George F., Jr., decomposition characteristics of char-forming phenolic polymer used for ablative composites, 6862

Symbols:

alphanumeric characters, etc., legibility, reference handbook, 6917
 defense materials system program identification, use in segregating renegotiable and nonrenegotiable subcontracts, 13105
 display, legibility studies, 63-64
 identification, for iron and steel, nonferrous metals, and alloy products, Communist China, 6547
 Leroy and teletypewriter, relative legibility, 64
 military, field manual, 10261
 military map, legibility on television, 63
 Northwest range-plant, list, 14141
 supplementing text of instruction plates for military vehicles, military standard, 15197
Symposiums:
 AEC series, 10297, 12003, 14808, 15959
 aerospace measurement techniques, 6734
 biological interpretation of dose from accelerator-produced radiation, proceedings, 15960
 compartments, pools, and spaces in medical physiology, 15959
 computer simulation of plasma and many-body problems, 16928
 cotton-ginning wastes, control and disposal, 7063
 detonation, proceedings, 13030
 disposal of radioactive waste, 16747
 ethopharmacologic search for psychoactive drugs, proceedings, 17173
 fly ash utilization, 14329
 irradiation capsule technology, developments, international symposium, 8903
 long-range forecasting and planning, Air Force research program, 17340
 medical ethics and research, 18247
 neutron noise, waves, and pulse propagation, 12003
 nuclear science and technology for ceramics, proceedings, 12982
 nucleolus, structure and function, 7074
 pneumatic transportation of solids, 2542
 radiation preservation of foods, 1783
 research methods and instrumentation, development, 17163
 research reactors, utilization, 1797
 Rumanian National Symposium on Genetics, interview concerning meetings, 12703
 safety of large volume parenteral solutions, 15275
 science and criminal justice, 11699
 solidification and long-term storage of highly radioactive wastes, proceedings, 5767
 Soviet, man-machine systems problem, report, 16753
 technology and use of lignite, Mines Bureau-University of North Dakota, proceedings, 1398
 technology and world trade, proceedings, 8520
 timers for ordnance, proceedings, 104
 tumors of alimentary tract in Africans, 14632
 vestibular organs, role in exploration of space, 5191
 water desalination, proceedings of 1st International, 9587, 11214-215
 Synapses, brain stem and spinal cord, characteristics and significance in carnivores, USSR study, 12711
Synchronization:
 clocks, remotely located, study, 8422
 addendum, 14873
 Tv synchronization system features stability and noise immunity, 11455
 Synchronous satellites, *see* Satellites.
 Syncom, *see* Satellites.
 Synoptic catalogs, *see* Catalogs.
 Synoptic meteorology, *see* Meteorology.

INDEX 1967

Synthesis:

- asynchronous sequential circuits, 1473
- automatic frequency control systems responding to Doppler frequency shift, USSR study, 16742
- gas, using recycle system, kinetics, 9790
- higher order hydrocarbons on hot tungsten filaments, 8504
- highly halogenated monomers and polymers, 9855
- infrared horizon radiance profiles from meteorological data inputs of 15 μ band, 9801
- Synthesis gas, *see* Gas.
- Synthetic fibers, *see* Fibers.
- Synthetic organic chemicals, *see* Organic compounds.
- Synthetic resins, *see* Resins.
- Synthetic telephony, USSR, 5010
- Synthetic woven goods, *see* Textiles.
- Syphers, Grant E., nomination, hearing, 15153
- Syphilis, laboratory aspects, 18170
- Syria:
 - background notes, 18225
 - capsule facts for Armed Forces, 11976
- Syringes:
 - automated microsyringe, accurate and reliable device, 14415
 - microsyringe design, with micrurgy chamber, allow more efficient micromanipulations, 16882
- Syrups, *see* Sirups.
- Systemic lupus erythematosus, *see* Lupus erythematosus.
- Systems:
 - analysis, pursuit urged, USSR study, 1225
 - automatic, optimal training algorithms in case of nonideal teacher, USSR study, 9619
 - behavioral model of man, 1967, his chains revealed, 14401
 - central digital data acquisition, computer-controlled, 11492
 - communication satellite for transmission of unidirectional (simplex) programs, use, USSR study, 15386
 - DCS equipments/systems performance standardization program, 9360
 - defense systems resources in civil sector, 17371
 - emergency escape, uses self-braking mechanism on fixed cable, 5223
 - fusion welding, maintains constant penetration, 11443
 - high-energy-rate magnetohydraulic metal forming system, 11463
 - high-pressure gases, automatically supplies analytical samples, 11442
 - laser, generate single-frequency light, 16943
 - logic, aids in evaluation of project readiness, 1456
 - reliability of complex technical systems, USSR study, 12743
 - structural analysis and matrix interpretive system (SAMIS), 12899
 - system enables dimensional inspection of very large structures, 14422
 - system identification and pattern recognition, 9810
 - telemetry, numerical data frame readout system used in testing, 12901
 - theory of large systems, USSR study, 12709
 - see also* names or types of systems, e.g. Osmosis.
- Systole, *see* Heart.
- Szalai, Kenneth J., influence of response feedback loops on lateral-directional dynamics of variable-stability transport aircraft, 11516

- Szaniuszlo, Andrew J., simulation of liquid-hydrogen turbine-type flowmeter calibrations, etc., 5251
- Szepest, Zoltan, solid state image intensifiers, 5343
- Szostak, Henryk, effect of explosions on snow structures, 99

T

- T.I.D.E. [Testing, Information, Discussing, and Evaluating]:
 - diary of counselor, 1966, summer, 7923
 - promising demonstration project, 7923
- T.V.A., *see* Tennessee Valley Authority.
- TAB, *see* Technical abstract bulletin.
- Tabio, Pablo E., relief, 10710, 16188
- Tables (compilation), *see* technical, scientific, and economic subjects.
- Tables (mathematics), *see* Mathematics.
- Tables (furniture):
 - wood, executive office, Federal standard, cancellation, 6311
- Tables (medicine):
 - Federal standard, 4794
- Tableware:
 - stainless steel flatware, Tariff Commission reports, 1646, 17255
 - White House china of Lincoln administration, 15600
- Tubular line-of-balance production control technique, 7433
- Tabulation:
 - process, Atlantida, case study in household sample surveys, 7497
 - tabulating equipment, card processing operations, standard time values, work measurement, 184
- Tachoscillography, pediatrics application, 12748
- Taconite, nonmagnetic, occurrences in Hibbing, Minn. area, reexamination, 14346
- Tactical vehicles, *see* Vehicles.
- Tactual perception, experiments and models, 6706
- Tadzhik Soviet Socialist Republic:
 - Academy of Sciences—
 - conferences of young scientists, 14254
 - Department of Biological Sciences, newly elected members, 16785
 - medical education problems, 2474
 - neuropathology and psychiatry developments, 4983
- Tadzhikistan, *see* Tadzhik Soviet Socialist Republic.
- Taenber, Conrad, lecture, Jan. 11, 1967, 4357
- Taft-Hartley act, *see* Industrial relations.
- Tagging summary of American shad, Alaska sardines (Wilson) and striped bass, *Roccus saxatilis* (Walbaum), 8037
- Tahoe, Lake:
 - and tributaries, pollution of Interstate waters, conference proceedings, 9509
 - south, water pollution, hearings, 2056
- Talk Song Sin, *see* Song Sin Talk.
- Taiwan:
 - establishing business in, 10462
 - market for U.S. products, 17853
- Take me to your leader, 10318
- Take 3 giant steps to clean air, 2821, 11731
- Take-off (aircraft):
 - climbout profiles of 4-engine turbojet transport airplane, noise measurement evaluations, 2699
 - jet-transport handling qualities and airworthiness criteria, research simulator for investigating, validation, 1476
- Talbot, Lee M., wild animals as source of food, 4810
- Talent, and skills, migration, some facts and figures, 14681
- Talerico, Robert L., *Florida externa Ferris* scale insect of hemlock, 17796
- Tallahala Reservoir:
 - Pascagoula River, Miss., engineer report—departmental edition, 13983
 - document edition, 13557

Tallinn, Estonia, travel to, Finnish brochure, 15429
 Tallmadge, G. Kasten, training equipment and individual differences, 9980
 Tallow, world production and trade, 4817
 Tamarac National Wildlife Refuge, birds, list, 15264
 Tamarack, botanical and commercial range in Lake States, 8070
 Tamarisk, growth, periodic mowings suppress, increase forage for browsing, 6368
 Tamarix, saltcedar leaves and stems, saline residues, composition, 6397
 Tampa, Fla., area wage survey, 2505
 Tampa Bay, oceanographic atlas, 12545
 Tang, Walter K., effect of inorganic salts on pyrolysis of wood, alpha-cellulose, and lignin determined by dynamic thermogravimetry, 8103
 Tank linings, *see* Linings.
 Tanks:
 axially symmetric response of elastic cylindrical shell partially filled with liquid, 6907
 cylindrical, liquid outflow during weightlessness, experimental investigation, 2720
 dynamic behavior of liquids in moving containers, 5159
 flexible and rigid ring baffles for damping liquid oscillations in large-scale cylindrical tanks, 8493
 fuel tanks and tank filler pipes for automotive vehicles, Federal standard, 4795
 liquid hydrogen, normal gravity self pressurization, 18019
 pressurant requirements of helium for liquid-hydrogen expulsion using submerged gas injection, 14492
 pressurized, preformed stiffeners used to fabricate structural components, 6842
 propellant, venting in zero-gravity environment, 5164
 titanium, stress corrosion failure retarded with glass bead shot peening, 14413
 water-closet, trim, standard of trade, 5287
 Tanks (military science):
 employment, Fleet Marine Force manual, 16849
 Tanning and tanning materials, extracts, suspension of duty, continue, report, 4584
 Tantalum:
 alloys resist creep deformation at elevated temperatures, 6748
 columbium and tantalum alloy development, 11389
 dislocation structures in slightly strained tungsten-tantalum alloys, 14486
 nonelectrolytic capacitors developed, 2667
 tantalum and steel apparatus, use for molten Cd-Mg-Zn alloys, 8397
 Tantalum carbide:
 Hall coefficient, as function of carbon content and temperature, 18018
 thermodynamic data, 1410
 Tanzania:
 background notes, 1621
 Burundi boundary, study, 1630
 Kenya boundary, study, 1631
 labor conditions, 2517
 mineral industry, minerals yearbook chapter, 8355
 Tao-tai Hsia, *see* Hsia, Tao-tai.
 Tape, Gerald F.:
 remarks—
 Dec. 13, 1966, 1813
 May 4, 1967, 8916
 Tape, TFE-fluorocarbon (polytetrafluoroethylene) resin skived tape, standard of trade, 5286
 see also Adhesive tape—Electronic data processing systems—Punched tape.
 Tape readers, *see* Readers (tape).
 TAPER (temporary authority pending establishment of register) employees, *see* Government officials and employees.

Tapering pants, 7281
 Tapeworms, general information, 1574
 Tapia Davila, Luis, relief, 10717, 12237, 16122
 Taps and dies, tool and die industry, problems, report, 4514
 Tar:
 coal tar distillates and residues, mass spectrometric analyses, 14354
 coal tar enamel, synthetic resin primer, 10073
 lignite, low temperature, produces phthalic and maleic anhydrides, 9768
 low-temperature bituminous coal tar, identification of distillable paraffins, etc., 12795
 resin fraction from various low-temperature tar pitches, characterization, 6632
 yields and analyses of tars from coal carbonization, 16850
 Tar roofing, *see* Roofing.
 Tar siding, *see* Siding.
 Tarassuk, N. P., dye binding of milk proteins, 4152
 Targets:
 cratering in low-density targets, 14420
 interchangeable anodes, X-ray source uses to vary X-ray wavelength, 14424
 optical, simplified fixture permits precision alignment, 2670
 point-source detection system rejects spatially extended radiation sources, 6784
 probability of target lock-on by automatic ranging during automatic search, USSR study, 11283
 see also Radar targets—Sonar targets.
 Tariff:
 act of 1930, special and administrative provisions under titles 3 and 4, text, 3890
 Canadian, customs tips for Expo 67, 9358
 communications carriers, FCC rules and regulations, 3279
 concessions granted by United States at GATT trade conference—
 general summary, 15751
 list, 13128-129
 customs administration, agreement with Philippines, 10101
 customs bulletin, weekly, 3174
 customs cases adjudged, 10881
 customs duties, code of Federal regulations, 12525
 customs hints for nonresidents, 10885
 French edition, 15179
 German edition, 13908
 Italian edition, 13907
 Spanish edition, 13906
 customs hints for returning U.S. residents, 10882
 customs law violations, warning to masters of vessels, 7843
 customs regulations, 3175, 4665
 revised pages, 4666, 6138, 10883
 customs trademark information, 10884
 decisions under customs laws—
 Customs Court, 972, 9359, 16454
 weekly report, 3977
 publications, price list, 5415
 schedules, 3927
 amend to change dutiable status of watches, etc., from insular possessions—
 law, 509
 report, 911
 annotated, 3928
 supplements, 2943, 7204, 10111, 14702
 technical amendments act, extension of time for filing certain requests—
 law, 13523
 reports, 9089, 13800
 summaries of trade and tariff information, 7203, 8765, 18237
 tariff-rate import quotas, 9357

INDEX 1967

Tariff—Continued

treatment of articles assembled abroad of products of U.S., law, 510
see also names or classes of articles imported or exported.

Tariff Commission:

appropriations, 1967, law, 501
appropriations, 1968—
hearings, 10632, 16390
reports, 10616, 16372
notices of hearings, investigations, etc., 3926
press releases, 3764
reorganization—
hearings, 9160, 10850
message from the President, 9061
reports, 9111, 10759
report, 1966—
departmental edition, 7202
document edition, 5985

Tariff examiners, see Transportation tariff examiners.

Tariffs and trade, general agreement on, see General agreement on tariffs and trade.

Tarim River and Valley, basin, description of deserts, 16777

Tarjan, George, comments, Mar. 1967, 7048

Tarpaulins, for fumigation, roller system to facilitate covering boxcars, 13202

Tarrants, William E., work injuries and work injury rates in heavy construction industry, 17890

Tartaron, Francis X., effect of lime structure in oxygen steelmaking, 6682

Tashiro, H., development of blacklight traps for European chafer surveys, 7303

Tasmania, lights and fog signals, list changes, 1537, 7004, 11642, 18099

Tate, Ray J., soil survey of Gwinnett County, Ga., 15748

Tate County, Miss., soil survey report, 11811

Taube, Carl A., employees in nursing and personal care homes, number, etc., 7098

Taunton quadrangle, Mass., geology, 9560

Tax Court:

appropriations, 1968—
hearings, 6027, 10806
law, 13529
reports, 9097, 10791
reports (decisions)—
bound volumes, 2944, 8768, 17259
consolidated pamphlets, 3929

Tax exemption:

applications, revocation or modification of exemption rulings and determination letters, issuance of rulings involving prohibited transactions, procedure outline, 14205

combat pay exclusion for commissioned officers, increase, law, 452

Federal excise, on beer and tobacco products, GAO review, 9554

foundations and charitable trusts, their impact on our economy, committee prints, 4562, 10679

print additional copies, reports, 13653, 13820

foundations, their impact on small business, hearings, print additional copies, reports, 13653, 13820

House of Representatives majority and minority rooms from D.C. sales and use taxes, report, 9087

pension, annuity, profit-sharing, stock bonus, or bond purchase plans, and exempt status of related trust, procedure outline, 12652

Tax guide for U.S. citizens abroad, 2414

Tax law specialist, 6463

Tax refunds:

attributable to net operating loss deductions, opportunities for reducing cost, Internal Revenue Service, GAO report, 11149

Federal gas tax refund, nonhighway and transit users, 1143

Tax refunds—Continued

interest on income tax refunds made within 45 days after filing return—
law, 1970
reports, 2023, 2097

internal revenue taxes, refunds and credits, report, 9057

revenues increased by improving controls etc., relating to interest paid on Federal income tax refunds, Internal Revenue Service, GAO report, 2344

Tax returns, see Income tax.

Taxation:

attempted criminal violations of tax laws, detection and investigation, 16721

career opportunities, IRS—
in tax work, 2400

tax law specialist, 6463

tax technician, 1148

current tax developments (remarks) 10117, 13165

double, convention with—
Belgium, protocol, 2908

Brazil—
hearing, 17651

text, etc., 9185

Canada, supplementary—
hearing, 17651

report, 17620

text, etc., 4575

Trinidad and Tobago—
hearing, 17651

report, 17620

text, etc., 6063

United Kingdom, 2921

exports, recommendations of Action Committee on Taxation, status report, 9021

farmland—
differential assessment, near cities, experience in Maryland, 17712

rural-urban fringe, summary of State preferential assessment activity, 16486

Federal tax lien act—
law, 433

legislative history, 757

report, 656

foreign investors tax act of 1966—
law, 513

law, summary, 9177

legislative history, 7762

report, 702

Senate amendments, summary, 4567

summary of House bill and suggested technical amendments, 2114

guide for U.S. citizens abroad, 2414

highway statistics, 13101

intergovernmental relations, results of questionnaire, print additional copies, reports, 4597, 10585

international tax matters, current developments in U.S. treatment, (remarks), 8769

join the world of international taxation, career opportunity, 8217

key factor in business decisions, 1598

open space land planning and taxation, bibliography, 12627

publications, price list, 5415

quarterly tax reports, 5894, 7495, 10385, 10034

real property transferred by RFC to other Govt. departments, payment in lieu of taxes, extend—
law, 13531

reports, 10606, 13793

recommendations for taxes—
hearings, 17614

message from the President, 16154

small business, 1967 guide, 2413

social security—
employers in Virgin Islands, Guam, and American Samoa, 2402

household employer's tax guide, 2401

State and local governments revenue, quarterly summary, 5894, 7495, 10385, 16034

Taxation—Continued

State-local taxation and industrial location, interrelationship, 15823
State tax collections, 1966 report, 180
States, interstate taxation act, reports, 9084, 13682
tax overlapping in U.S., supplement, 4079
tax policy and tax administration (remarks), 10125
tax policy developments in corporate area (remarks), 7215
tax surcharge and national economy (address), 18244
uses of tax policy (remarks), 8776
see also Employment taxes—Excise taxes—Franchise tax—Income tax—Inheritance and transfer tax—Internal revenue—Revenue—Sales tax—Social security—Tax exemption—Tax refunds—also names of articles, etc., subject to tax
Taxes, *see* Taxation.

Taxonomy:

distribution, and polymorphism in Labidocera jollae group, etc., 8544
extinct sea mink, 6964
Streptomyces griseus (Krausky) Waksman and Henrici, study of some strains, 54
Subgenus Podosmum and section Epilampas of Muhlenbergia (gramineae), taxonomic study, 17047
systematic position of 2 taxa erroneously placed in family Stenomitridae (lepidoptera), 5304

Taylor, James T., digital filters for non-real-time data processing, 17935

Taylor, Dan, AFOSR research, 15878

Taylor, Earl G., Baltimore regional wholesale food distribution facilities, 5650

Taylor, George S., Court of Customs and Patent Appeals custom cases adjudged, etc., 10881, 12437

Taylor, H. Ralph:
addresses, etc.—

Nov. 15, 1966, 2386

Nov. 22, 1966, 2379

May 19, 1967, 11198

Sept. 12, 1967, 17841

Taylor, J. Thomas, thermal control considerations for manned orbiting space station, 11538

Taylor, John G., brooding chicks with infrared lamps, 15857

Taylor, Maynard F., correlation of friction coefficients for laminar and turbulent flow etc., 17014

Taylor, Proctor P., Jr., preparing contractor reports for NASA, data presentation, 1443

Taylor, Rufus L., nomination, hearings, 942

Taylor, Walter W., relief, 319

Taylor, William R., enzyme method of clearing and staining small vertebrates, 11605

Taylor, David, Model Basin, *see* David Taylor Model Basin.

Tea, foreign agriculture circulars, 3345

Teacher Corps:

naming, extending program, etc.—

law, 12176

reports, 12275, 13643, 13805

Teacher Corps, National, *see* National Teacher Corps.

Teachers:

civil defense adult education, personal and family survival, manual, 7916, 12470
compensation, long-term trends in urban public schools, 5080

constructing and using achievement tests, guide for Navy instructors, 1544

daily program for child development center, manual, 15204

District of Columbia—

leave act of 1949, amend relative to sick

leave provisions, report, 14991

retirement act, amend to provide full

annuity at age 55, report, 14992

salaries, increase, law, 4992

Teachers—Continued

education, standards, 6195

elementary, employment opportunities, Indian Affairs Bureau, examination announcement, 1922

discontinuance notice 1921
English teaching forum, facts and ideas for teaching English as foreign language, 5577

experienced elementary and secondary fellowship for graduate study, program, 6182

Federal income taxes program, general, guide, 1149

Israel, modern education system, 6187

meeting shortages, higher education act amendments—

law, 12176

reports, 12275, 13643, 13805

of disadvantaged youth, national defense education act, institutes for advanced study, summer 1967, handbook for directors, 1003

opportunities abroad for teachers, teaching, summer seminars, 13958

prospective teacher graduate fellowships, 1967-68 programs, 7906

public elementary and secondary day schools, fall 1966, statistics, 7896

retired, opportunity to reach the forgotten through VISTA, 15208

teaching for the future (address), 13965

see also Faculty (schools).

Teaching:

automatic systems, optimal training algorithms in case of nonideal teacher, USSR study, 9619

beautiful junk, inexpensive materials for preschool program, 17709

Federal income taxes program—

farm, 8221

general, 8220

Muslim, reviewed in Soviet press, 1252

raw luster for college teaching, address, 9404

Peace Corps, from rote to reason, 5385

teaching as business and desire (address), 9412

teaching for the future (address), 13965

see also Programmed instruction—

also subjects taught.

Teaching machines:

computer-aided teaching of dynamic system behavior, 62

exhibit, USSR study, 1201

Teak:

pruning, effects, 12576

young, plantation, mowing understory vegetation, 12574

Teal, green-winged, distribution, migration and population dynamics, 14067, 16633

Team training, 18109

Teamwork, TVA and Tennessee Valley Trades and Labor Council (periodical), 3930

Tech Top Project, *see* Project Tech Top.

Teche Bayou:

basin, engineer report—

departmental edition, 4741

document edition, 4479

Technical abstract bulletin, Government-wide index, 3381

Technical assistance:

EDA program, what it is, how to apply, 7867, 13933

management and technical aid for displaced small businesses, 14643

technical assistance aid (series), 8286

see also Foreign aid.

Technical bulletins:

Agriculture Department, 54, 1722-23, 4151-52, 5685-88, 7303, 8849, 11945, 13252, 14763-765, 17334-336

Coast and Geodetic Survey, 5946

Technical cooperation, *see* Foreign aid—also

name of country with which agreement is made.

INDEX 1967

Technical cybernetics (USSR periodical): translations, 2481, 6502, 9615, 14226, 15401

Technical education:
determining courses of study, 1017
role of technical schools in improving skills and earning capacity of rural manpower, case study, 5040
technical education program series, 1000
vocational-technical program development, State reports, 6196

Technical history of environmental control system for Project Mercury, 18009

Technical information:
Army scientific & technical information program, 13306
Government research and development reports that may help your company, 14520
scientific and technical information service, organization in USSR, 2430
single and united system, construction, USSR study, 9646, 9675
systems, nonconventional, in current use, descriptions, 11623

Technical information bulletin, Public Health Service, 17164

Technical instruments, exports, 1958-66, analysis, 15983

Technical intelligence, 102

Technical journal of soils (Communist China periodical): translations, 1211

Technical libraries, *see* Libraries.

Technical manuals:
Army Department, 105-115, 1767-72, 4213-18, 5740-46, 7390-402, 8885-94, 10270-282, 11994-995, 13301-304, 14801-803, 15945-954, 17386-387
Army Strategic Communications Command, 7377
printing, procurement from equipment contractors, Defense Dept., GAO report, 2345

Technical memorandums:
Coastal Engineering Research Center, 7924-25, 10954, 13976, 16522-523
Environmental Science Services Administration, 6219-22, 7935, 9427-29, 10964-966, 12479, 15231, 16532
National Aeronautics and Space Administration, 2682

Technical news bulletin, National Bureau of Standards, 3931

Technical news from Department of Commerce, National Bureau of Standards, 3932

Technical notes:
National Aeronautics and Space Administration, 1473-1514, 2683-2730, 5228-75, 6851-6907, 8480-506, 9871-9918, 11495-555, 12919-976, 14447-497, 15554-581, 16970-17011, 18008-53
National Bureau of Standards, 1525-26, 2743-46, 5288-93, 6921-24, 8526-27, 9944-45, 11589-592, 12989, 14517-519, 17038-42, 18080-83
Weather Bureau, 2972

Technical papers:
Census Bureau, 5902, 13401, 16035
National Advisory Commission on Food and Fibers, 15666, 17122-124, 18144
Sport Fisheries and Wildlife Bureau, 4811-12, 8042, 12551, 14070, 16636, 17787

Technical progress reviews, 3449, 3645, 3697, 3806-7

Technical publications, National Bureau of Standards, 1527

Technical record of design and construction: Navajo Dam and Reservoir, 7103, 8667
Willard Dam, 8671

Technical reference, Department of Labor, safety training program, TR IS series, 9733-41

Technical reports:
Air Weather Service, 7318, 8860, 15883-884, 17339
Army Aviation Materiel Laboratories, 116-117, 1773, 4220-23, 5747-49, 7408-11, 8897-98, 10286-293, 11996-998, 15307-310, 15955, 17388
Army Engineer Division, North Pacific, 2201, 4729, 10949
Army Transportation Research Command, 8895
Civil Defense Office, 4384, 5917, 7529-30, 9891, 14847, 16058-60
Coastal Engineering Research Center, 1022
Cold Regions Research and Engineering Laboratory, 99, 4200-2, 7381, 8879, 11983, 15932-933, 17377-379
Electronic Systems Division, 62-65, 4166, 8861-64, 13262
Environmental Science Services Administration, 2223-25, 4748, 6223-25, 9430, 10967-968, 16533
Government reports, standard for descriptive cataloging, 6245
National Aeronautics and Space Administration, 1515, 6908-10, 8507-8, 9919, 11556-559, 12968-971, 14498-499, 17012-16, 18054-56
Naval Oceanographic Office, catalog, 11632
Naval Training Device Center, 2784, 5343, 7024, 8585, 9980-82, 11070, 15635, 18109
Ohio River Division Laboratories, 16524, 17754
Personnel Research Laboratory, 4170-72, 5705, 7339, 13267-268, 15891-893, 17343-345
School of Aerospace Medicine, 65-92, 1730-44, 4175-87, 5706-15, 7341-70, 8868-69, 10231-244, 11954-967, 13269-272, 14770-782, 15894-901, 17346-363
Veterans Administration, 13171
Waterways Experiment Station, 1030, 2220-21, 4743-45, 6210-16, 7930-34, 9424, 10960-962, 13985-988, 16526-529, 17737

Technical research notes:
Army Personnel Research Office, 118, 4224-26, 5750-51, 7403-5, 10282A-283
Behavioral Science Research Laboratory, 14804

Technical research reports, Army Personnel Research Office, 119, 4227-28, 5752, 7406

Technical services:
Engineers Corps in war against Japan, 5096
government policy and practices with respect to contracts, hearings, 10843
mid-level positions, examination announcement, 16068
State:
designated agencies, list, 10469
national conference, report, 12131
working relationships (remarks), 4450

Technical study series, National Commission on Food Marketing, 5297-98, 9947

Technical translations:
bibliography (periodical), 3933
National Aeronautics and Space Administration, 5276-77, 6911-12, 8509-12, 9920-28, 11560-573, 12972-976, 14500-504, 15582, 17017, 18057

Technical writers, *see* Authors.

Technicians:
Army National Guard program, job descriptions, pamphlet, change, 11597
current employment market, 4727
employment in State governments, 15450
engineering and physical science, examination announcement, 13445
engineering and scientific, examination announcement, amendment, 1910
engineering, pay, national survey, 2507

Technicians—Continued

National Guard, clarify status—
hearings, 6030, 17640
reports, 658, 6012
radiological health, training, 13093
restoration technician, examination an-
nouncement, 17455
senior level positions, examination an-
nouncement, 8988
women in technical positions, fact sheet,
5602
see also Computer technicians—Electronic
technicians—Fire control technicians—
Mathematics aids—Physical science
aids.

Technique for rearing pales weevil, 9538
Technique for verifying structural integrity
of full scale segments of launch vehicles at
transonic speeds, 6906

Techniques Development Laboratory, ESSA
technical memorandum, WBTM TDL
series, 9428-29

Technological innovations:
and human goals (remarks), 15976
innovation and profitability (address),
7568

problems and opportunities (remarks),
7584
technological innovation, its environment
and management, 5962

Technological Laboratory, Pascagoula, Miss.,
Commercial Fisheries Bureau, annual re-
ports, 4801, 16620

Technologists, *see* Forest products technol-
ogists—Medical technologists.

Technology:
academic technology, degree profile and
Federal contributions to universities,
etc., 14560

acquisition channels in commercial firms
and NASA dissemination program,
program, 14375

applied science and technological progress,
panel report—
articles, 16342
hearing, 15049

print additional copies, report, 16263
Army Materiel Command, manufacturing
methods and technology, 5-year pro-
gram, 15943

assessment, for determining public policy,
13717

Bulgaria, progress, 1967 program, 6494
Communist China, translations, 3952

computer—
cybernetics in service of Communism,
USSR studies, 12742

in Soviet economy, 1310
USSR problems in assimilating, 2449

education and changing technology (ad-
dress), 998

exchanges, agreement with Union of
Soviet Socialist Republics, 7182

future international meetings, world list,
4073

health service industry, 1965-75, report,
11297

Hungary, technical mechanical research
status surveyed, 15415

impact on desalting and energy develop-
ment and utilization (remarks), 10313

impact upon world trade, symposium pro-
ceedings, 8520

manpower and automation in perspective
of long-term technological change, sem-
inar on manpower policy and program,
2487

NASA technical reports for 1966, selected
listing, 12884

new pay scales for scientific workers in
Bulgaria, 1303

new technology reporting to NASA—
management guidelines, 1418

reportable items under new technology
clause, 5279

nuclear science and technology for ceram-
icists, proceedings of symposium, 12982

Technology—Continued

Panel on Science and Technology, 8th
meeting—

papers, 12315
proceedings, 9170

papers, contributions from History and
Technology Museum, title page, con-
tents, and index, 14529

policy studies, review and forecast, 2059
postal modernization, hearings, 13712

processing meat products, new technologi-
cal methods, 6546

relationship to transnational business
(remarks), 9025

requirements of food additive petitions,
FDA guidelines, 2285

science and technology for mankind's
progress, 13454

science, government, and public policy,
Government-science relationships dur-
ing 89th Congress, 13716

scientific and technical information (USSR
periodical), 3852

setting up socialist brigades for technical
progress, new regulations announced,
Bulgaria, 12668

sociological problems of development,
USSR review of new literature, 16787

space power systems advanced technology
conference, 1440

spacecraft sterilization, conference papers,
6190

State technical services—
act, amend to include Guam—
law, 475

report, 891
discipline-oriented or problem-oriented?
4452

technical thesaurus, manual for building,
4677

technology and criminal justice, task force
report, 11704

technology and world trade (remarks),
1958, 1961

technology and your new products, 13118

telephone industry, 1965-75, report, 6036

time, leisure, and computer, crisis of mod-
ern technology (remarks), 5799

Timisoara Center for Technical Research,
Rumania, activities, 1191

transfer—
address, 244
assessing, 2619

policy planning report, 10693

transfer and innovation, conference pro-
ceedings, 15616

USSR—
achievements, 14248

advancement and improvement, 1158

information services for technical prog-
ress, value, 6513

Lenin prizes, recipients, 9657

technical information, development,
9613

utilization (series), 5193-96, 6737-38,
8440-41, 11428-430, 15517-518, 16932-
933, 17953

utilization bibliography (series), 2618,
5026, 5439

water yield increase from atmosphere,
technological development plan, 5480

see also Space technology—Technological
innovations—*also* subjects.

Technology and Human Environment, Se-
lect Committee on, Senate, establish, hear-
ings, 10840

Technology and Science, Federal Council for,
see Federal Council for Science and Tech-
nology.

Tectonics:
analysis of upper Mississippi Valley zinc-
lead district, 4888

Upper Cretaceous and Tertiary rocks, east-
central San Juan Basin, N. Mex., 16693

Tedrow, R. L., digest annotated and dig-
ested opinions, U.S. Court of Military
Appeals, 9369

INDEX 1967

Teenagers, *see* Youth.

Tears sound off, 17726

Teeth:

- adults, decayed, missing, and filled teeth, 1960-62, United States, 5470
- dental care for chronically ill, 13089
- dental caries increments, evaluation with bite-wing roentgenograms, 14321
- dental caries status of Air Force enlistees, 7353
- dental health program for American Indians, Eskimos, & Aleuts, 11724
- healthy, growth, care, etc., 5433
- National Dental Health Assembly fluoridation, emphasis, 5449
- research explores dental decay, 1576
- thermography of human dentition, 17357

Teflon, *see* Polytetrafluoroethylene.

Tehama-Colusa Canal unit, *see* Central Valley project.

Tehama County, Calif., soil survey report, 14658

Tejon, Maria V. S., *see* Tejon, Virginia S.

Tejon, Virginia S., relief, 12227

Telecommunication:

- agreement with, Philippines, 1638
- code of Federal regulations, 7985-87, 9483
- communications, electrical, classification definitions, 17108
- engineering, installation practices CC TM technical manual, 7377
- high frequency ionospheric systems, statistical performance indexes, predicting, 2223
- international, convention and protocol—report, 7775
- text, 15779
- pre-sunrise operation of certain standard (A) radio broadcasting stations agreement with Canada, 15780
- space technology, 6731
- split phase link, characteristics, 15580
- see also* special method of communication.

Telecommunication Sciences and Aeronomy Institute, *see* Institute for Telecommunication Sciences and Aeronomy.

Telegraph:

- and telephone committees of FCC, report in domestic telegraph investigation, 17751
- carriers—domestic and overseas, annual statistics, 16565
- quarterly operating data, 3797
- franks, FCC rules and regulations, 3279
- input-output devices for digital computer systems, USSR study, 1254
- telegraphy, patent classification definitions, 17106
- wire, classification of employees, FCC rules and regulations, 3279

Telegraphy, *see* Telegraph.

Telemetry:

- automatic checkout system, 18002
- digital system detects binary code patterns containing errors, 2647
- efficient coding system for deep space probes with, 14493
- evolution of satellite PFM encoding systems, 5241
- maximum utilization of FM subcarrier bandwidth, 9992
- miniature capacitive accelerometer especially applicable, 1470
- satellite, data simulation program, generalized, 1508
- satellite station near Fairbanks, Alaska, agreement with European Space Research Organization, 11836
- space, data compression with error-control coding, 11558
- STARS II, fully automatic satellite data processor, description, etc., 11527
- system, miniature, accurately measures pressure, 6786
- systems, numerical data frame readout system used in testing, 12901

Telemetry—Continued

temperature-sensing system for rhesus monkeys, 17360

Teleostei, copepod crustaceans parasitic on teleost fishes of Hawaiian Islands, 11603

Telephone:

- abusive and harassing calls in interstate and foreign commerce, or within District of Columbia, amend communications act—
- hearings, 10826
- reports, 4582, 9294
- carriers—
- annual statistics, 16566
- quarterly operating data, 3796
- commercial communications services, Air Force manual, 4164
- companies—
- class A and class B, classification and compensation of employees, FCC rules and regulations 3279
- consolidation, acquisition or control applications, FCC rules and regulations, 3279
- uniform system of accounts, FCC rules and regulations, 3278
- criminal penalties for making certain calls in D.C., report, 9128

directories—

- Agriculture Department, 17337
- Atomic Energy Commission, 14810
- Commerce Department, 16110
- House of Representatives, 7592
- Interior Department, 17850
- NASA headquarters, 16926
- Senate, 760, 10689
- State Department, International Development Agency, Arms Control and Disarmament Agency, 15764
- franks, FCC rules and regulations, 3279
- House Members, service outside D.C., payment from contingent fund, report, 10583

Industry, technology and manpower, 1965-75, report, 5036

materials acceptable on systems of REA borrowers, list, 3513, 13111

rural programs—

- statistical report, 2849
- supplemental financing—
- hearings, 938, 10625, 17585
- report, 13659

service to military family housing occupants, methods used to provide, Defense Dept., GAO review, 6383

sound-powered, talker's manual, 4422

statistical bulletin, 3801

synthetic telephony, USSR study, 5010

systems, invasions of privacy, hearings, 6118

telephone and telegraph committees of FCC, report in domestic telegraph investigation, 17751

telephony, patent classification definitions, 17107

Telephone cabinets, wood, Federal standard, cancellation, 6308

Telephone cooperatives, annual meeting guide, 7105

Telephone lines, extension, etc., FCC rules and regulations, 3279

Telephone operators:

- examination announcement, 5923, 13451
- suspension notice, 4409

Telephony, *see* Telephone.

Telescopes, *see* Coronagraphs—Radio telescopes

Telesat, *see* Satellites.

Teletype:

- and Leroy symbols, relative legibility, 64
- maintenance of teletypewriter systems, FAA handbook, 7946
- noise-rejection coding of digital teletype communications in complex automatic hydrometeorological telemetering systems, USSR study, 8275

Teletype—Continued

TT-299/UG equipment, maintenance training, trainee's guide, 1547

Teletypewriter, see Teletype.

Television:

anticompetitive effects of sale of network TV advertising, hearings, 10857, 16424
apparent resolution, means for improving, 11478

broadcast actions, reports, 3269
cable TV, requests filed under FCC rules, 8269

center for ITV, 997
closed circuit system monitors welding operations, 12893

closed-circuit TV maintenance course, class C, curriculum, 7015
cloud photography, meteorological satellite data, catalog—

ESSA 3, 16536
TIROS IX, 8227
TIROS X, 13990

community antenna systems, copyright law revision, hearings, 4645

diagnosis, USSR study, 1257
educational, Ford Foundation proposal for broadcasters non-profit satellite service, hearings, 2111

emergency broadcast system, basic plan, 14016

head-controlled system produces high-quality remote image, 16887

households with sets in US, current housing reports, 7477

households with UHF and color sets in selected metropolitan areas, current housing reports, 15989

images, ultrasonic, improved by use of Lamb-wave orientation technique, 15494

instructional television, research, 9409
military map symbols legibility, 63

postal service uniform or badge worn in productions, permit use, report, 14975

predictions and projections of election results, effects—
hearings, 16400
report, 15143

professional football telecasts, protect secondary school contests—
hearings, 742
law, 504

law, legislative history, 2064
law, summary, 4566
Senate amendments, summary, 4568

public broadcasting act of 1967—
hearings, 10824, 13710
reports, 10756, 14880, 16245

receiving sets, deceptive advertising as to sizes of viewable pictures, trade regulation rule, 6337, 11068

receiving tubes, temporary suspension of duty, report, 2028

sets, current industrial reports, 4323, 12072

signal processing system, 14438
stations, require furnishing of free time to candidates for public office, hearings, 16400

synchronization system features stability and noise immunity, 11455
see also Scanning.

Television cameras, see Cameras.
Tellman, S. J., measurement of uniaxial creep of selected adhesives in free film form, 12570

Tellurium:
distribution—
Cripple Creek district, Colo., 9571
Ely mining district, White Pine County, Nev., 9564

materials survey, 16854
Tellurium isotopes, elastic and inelastic scattering of 42-MeV alpha particles, 11536

Telsey, Leon G., nomination, hearings, 6094

Temperature:

absolute temperature measurement at microwave frequencies, 17016
bend transition of wrought tungsten, effect of ductile cladding, 17008

brazing alloy holds bonding strength over wide temperature range, 5207
calculating steady temperature in gas containing heat sources, digital computer program, 16987

control, orbital otolith experiment, 12868
distribution, of conical porous membrane during planetary entry, 11554

electron, nonequilibrium, magnetically induced, 9995
elevated—

edgewise compressive properties of titanium and nickel-base sandwich constructions, 8102

tensile properties of discontinuous-fiber composites, metallurgical and geometrical factors affecting, 8498, 14451

undercoat prevents blistering of silver plate, 11444

fast response thermocouple measurement, in cryogenic gases, 6820

fixture tests bellows reliability through repetitive pressure/temperature cycling, 11448

freezing spring temperature damage to knobcone pine, 8117

high—
bearing cage materials, evaluation, 5274
brazing tungsten for nuclear reactor service in hydrogen, 11506

coating of metals, USSR study, 9677
cobalt-iron alloy, investigation, 1500

engines, cold-air investigation of turbine, 5236
thermometry seminar, 129

initial load and exposure to moderately elevated temperature effect on room-temperature fatigue life of Ti-8Al-1Mo-IV titanium-alloy sheet, 14464

instrument accurately measures small changes on test surface, 6799

inversions, Arctic and subarctic survey, 4200

jet, effect on refraction of sound, 14389
limitations of ester, ether, and hydrocarbon base lubricants in 25-mm bore ball bearings, 15576

liquefied gas streams, mixer conditions, 5219

low cost instrument to measure, 11127
low, hexagonal and cubic ice formation, study, 17375

maximum surface, parameters for predicting of wood in exterior exposures, 1096

measurement—
bibliography, 11584
in charring ablator, effect of thermocouple wire size and configuration, 6864

on board entry vehicle, use in determining structure of atmosphere, 9904

orbiting spacecraft, use of analog computation in predicting, 6853

Pacific Northwest, monthly, 3669
Pegasus spacecraft, thermal design, 1477
evaluation, 2687

precision capacitor has improved temperature and operational stability, 16885

pressure diagrams construction for multi-component systems after method of Schreinemakers, geometric approach, 2359

programmed, modulating valves, 2
regulation, heater control circuit provides both fast and proportional control, 11445

river temperatures, Pacific Northwest, 3839-40

sea water, frequency spectrum of short-period fluctuations, USSR study, 1180

INDEX 1967

Temperature—Continued
 sound absorption in air versus humidity and temperature, 6707
 spectroscopic measurements in plasmas, 2714
 stability, improved performance in sensing disks for slug-type calorimeters, 11482
 steady-state distribution within plane or axisymmetric solids, computer program, 15487
 surface, of materials in presence of extraneous radiation, methods for obtaining, 16975
 temperature and dew points for Northern Hemisphere, 6992
 temperature and wind velocity combinations, recurrence in lower 100-m layer of atmosphere, experimental calculation, 11565
 thermophysical properties of potassium, summary, errata, 12920
 transient and steady-state temperature prediction for complex body shapes simplified by computer program, 9825A
 upper stratosphere and mesosphere, measurements, 17012
 water, data correlation and analysis for Oregon streams, 8177
see also Body temperature—Heat transfer—Ocean temperature.
 Temple, Tex., land transfer to, report, 6006
 Ten-bit analog-to-digital converter, 11486
 Tenants, *see* Landlords and tenants.
 Tengan, Matsusuka, relief, 568
 Tennessee:
 Appalachia counties, forest industries, 16666
 census of agriculture, 1964, State and county statistics, 16040
 census of manufactures, 1963, area statistics, 1850
 census of mineral industries, 1963, area statistics, 5342
 climatological data, 3096
 county business patterns, 4319, 13381
 land conveyance to State for use of Memphis State University—
 hearing, 9326
 law, 12174
 reports, 7709, 12365
 mineral industry, minerals yearbook chapter, 6666
 Pennyroyal area, commercial tobacco-livestock farms, costs and returns, 16490
 postal map, 5398
 precipitation data, hourly, 3401
 soil survey laboratory data and descriptions, 13126
 training and technology, new skills for underemployed, 16792
 Tennessee River and Valley:
 forest resources and industries, 10116
 labor movement between farm and non-farm sectors and multiple-jobholding by farm operators, 17262
 navigation and economic growth, Tennessee River experience, 5567
 precipitation in basin, monthly, 3698
 water resource, nature's constant gift, report, 2945
 Tennessee Valley Authority:
 annual report, 5566
 appropriations, 1967, public works—
 hearings, 939
 law, 403
 appropriations, 1968, public works—
 hearings, 12287, 16393
 report, 13678
 electricity sales statistics, retail distribution, 3231
 Engineering Laboratory research, 1965-66, in fields of civil engineering, mechanical engineering, instrumentation, 17260
 fertilizer trends, 17261

Tennessee Valley Authority—Continued
 financial statement, 1647
 GAO examination, 6375, 7604
 flood losses, managing, 13162
 forestry bulletin, 18239
 industrial development in area, 14706
 Maps and Surveys Branch, general information, 1649
 navigation and economic growth, report, 5567
 power, 1966 annual report, 1651
 power, 1967 program, 17263
 teamwork (periodical), 3930
 TVA, 1966 programs, 14708
 Tensile strength, *see* Strains and stresses.
 Tensiometers, pendant drop interfacial, modifications, 6640
 Tension:
 acclimatization versus tolerance to stress, annotated bibliography, 17363
 parawings, tension-structure, low-speed wind-tunnel investigation, 14454
 Tension shells:
 flexible towed, flutter, 9818
 flow field and heat-transfer investigation, 5270
 Tenure of land, *see* Land tenure.
 Tepee burners, *see* Incinerators.
 Terichow, Oleg, pendulum sclerometer for surface hardness studies, 11381
 Terminal boards, Federal item identification guide, 13918
 Terminals (transportation):
 Air Force guide, Defense Supply Agency handbook, 10888
 air traffic control, 13276, 14785
 Navy, Marine Corps, and Coast Guard guide, Defense Supply Agency handbook, 17690
 Termites, nonsubterranean, control, 7270, 8826
 Terms used in international agricultural trade, 9524
 Ternary alloys, *see* Alloys.
 Terrains:
 NRL terrain clutter study phase 1, 14591
 photography on Gemini IV mission, 11528
 vector diffraction theory, 7935
 Terrestrial magnetism:
 earth's magnetic field—
 influence on—
 backscattered signal, USSR study, 6575
 diurnal variation of f_oF₂ (Fourier analysis), 8512
 NELIAC-N computer program to calculate components, 17083
 internal magnetization of seamounts and its computer calculation, 12612
 polar region studies in geomagnetism, USSR, 8277
 Territories:
 health authorities, 1967, directory, 15680
 report on 1965-66 compensatory education programs under title 1, Public law 10, 7890
 Territories Office:
 appropriations, 1968, hearings, 7734
 programs, briefing, hearings, 10655
 Terrorism:
 organizations, curb, report, 16250
 Viet Cong terror tactics in South Vietnam, 17218
 Tertiary limestone, *see* Limestone.
 Tertiary period:
 lower Tertiary stratigraphy in west-central Puerto Rico, 17820
 plants from Cook Inlet region, Alaska, 2365
 rocks, east-central San Juan Basin, N Mex, stratigraphic and regional tectonic implications, 16693
 rocks in Corozal quadrangle, Puerto Rico, 1112
 tertiary biostratigraphy of Cook Inlet region, Alaska (series), 2365

Tertiary period—Continued

zoogeographic evidence for late Tertiary lateral slip on San Andreas fault, Calif, 17827

Test and evaluation report, 8599

Test facility, ballistic, for personal armor material, military standard, 9375

Testimony, *see* Evidence.

Testing:

employment testing procedures, guidelines, 2227

National Bureau of Standards, test services, inserts, 8518, 9937-39, 12680, 15585-587, 17032

nondestructive, trends and techniques, 11430

pressure transducers, automated tester permits precise calibration from 0 to 1050 psi, 15498

State departments of education—

personnel directory, 6178

publications, guide, 6185

see also names of substances or objects tested.

Testing apparatus:

calibrating ultrasonic test equipment for checking thin metal strip stock, 12632

fire control technician training, test equipment, trainee's guide, 7023

Princeton dynamic model track, general description, 7409

tester automatically checks insulation of conductors in cables, 14369

tester for study of rolling element bearings, 8448

Testing laboratories, U.S. Government, directory, 14048

Tests, *see* types, or names of tests.

Tethyan fusulinids, *see* Fusulinidae.

Tetramine, C-14 labeled, absorption and distribution. In relation to use in animal damage control, 4851

Tew, Ronald K., soil moisture depletion by gambel oak in northern Utah, 4831

Tew, Roy C., analog-computer study of parasitic-load speed control for solar-Brayton system turboalternator, 5258

Texas:

bituminous coal resources, 8158

census of manufactures, 1963, area statistics, 1851

census of mineral industries, 1963, area statistics, 4298

climatological data, 3096

cotton varieties planted in early producing section, 12430

county business patterns, 175, 14824

desalting of water supply, potential contribution to future supply, 15328

District Court, western district, new Midland-Odessa division, create, report, 16235

east, timber, 1964 harvest, 2323

electric rate book, 16585

farms, growth and capital accumulation, polyperiod analysis, 17336

highway safety study. Operation 66, joint engineering-enforcement project report, 1594

landings, fish and shellfish, 3934

livestock and meat industry, price information and market news, 13941

medical care of old-age assistance recipients, recovery of excess funds accumulated. GAO review, 8145

mineral industry, minerals yearbook chapter, 6667

municipal water supply from saline and conventional sources calculating costs, 12645

postal map—

eastern section, 5399

western section, 11698

precipitation data, hourly, 3401

radioactivity, airborne, 1952-55, maps, 1802

Texas—Continued

rice, rough, costs of drying and storing, 15864

salt domes, survey, 2541

weather stations, decadal census, 6228

west, engineering and economic aspects of cotton gin operations, 12542

see also Tiwa Indians of Texas.

Texas leaf-cutting ant, *see* Ants.

Texas Southmost College:—

land purchase by Agriculture Dept.—

hearings, 16303

law, 16143

reports, 13368, 16370

Textbooks:

acquisition under ESEA, guidelines, 16513

schools, and treatment of minorities, hearings, 2045

Textile fibers, *see* Fibers.

Textile machinery, census of manufactures, 1963, industry report, 4272

Textile mills, machinery, fiber and fabric consumption, census of manufactures, 1963, industry report, 4272

Textiles:

balloon fabrics, compatibility with ammonia, 4836

broad-woven fabrics—

blends and mixtures, current industrial reports, 14826

finished, preliminary, current industrial reports, 4322, 13387

broad-woven goods, looms in place Dec. 31, 1965, summary, current industrial reports, 5855

colorfastness to light, use of standard light-sensitive paper for calibrating carbon arcs used in testing, recommended method, 12981

cotton typewriter ribbon cloth, Tariff Commission report, 2942, 10110

dyeing and finishing industry, wage surveys, 2501, 15446

fabric consumption, census of manufactures, 1963, industry report, 4272

Federal item identification guides for supply cataloging, supplements, 5292

flammable fabrics act, amendments of 1967—

hearings, 12404, 15041

report, 13825

fluid treatment and chemical modification, patent classification definitions, 5369

household fabrics, making flame resistant, 10177

Industry—

job opportunities for non-whites in North and South Carolina, etc., 13994

starch use, economic evaluation, 7881

subcontractors' sales, shorts and seconds, 15723

USSR, news, 6531

weaving, how to inspect chart, 9691

knit cloth for sale, current industrial reports, 5867

man-made, depth of cut in tariff rates, 6th round GATT trade negotiations, 13354

man-made fiber broad woven goods, current industrial reports, 3170

narrow fabrics, current industrial reports, 4334, 5869, 12076

nonwoven fabrics, bonded fiber and conventional felts, current industrial reports, 4336

program, unique approach in business, Government relations (address), 10470

scouring and combing plants, industry wage survey, 15446

tufted products, current industrial reports, 7481, 16005-6

woven fabrics, current industrial reports, 3169

see also names of textiles.

TFE, *see* Polytetrafluoroethylene.

INDEX 1967

Thailand:
 amity and economic relations treaty, report, 15063
 Army area handbook, 5734
 background notes, 14668
 Cambodia boundary, study, 2883
 economy, basic data, 229
 establishing business in, 13464
 locomotives procured under military assistance program, Defense Department, GAO report, 6380
 mineral industry, minerals yearbook chapter, 8368
 postal services of U.S. Armed Forces, on-site inspection, report, 4505
 Thaler, G. J., algebraic methods for dynamic systems, 2600
 That troublesome transnational technological tiger, 9025
 Thatcher, John W.:
 ferroalloys, 6633
 silicon, 1415
 Thatcher, Robert C., pine sawfly *Neodiprion excelsus* Roh., 11104
 Thawing, tests of concretes of various strengths and air contents, 13986
 Thayer, Louis M.:
 nomination, hearing, 10823
 remarks, Oct. 25, 1967, 18094
 Theater, postal service uniform or badge worn in productions, permit use, report, 14975
 see also Drama.
 Theater of operations, *see* Combat areas.
 Theaters, *see* Motion picture theaters.
 Theclinae, *see* Butterflies.
 Theirs to reason why, 15940
 Theobald, P. K., Jr., minor elements in alluvial magnetite from Inner Piedmont belt, N.C. and S.C., 8172
 Theodolites, manual, use in midcourse navigation, 6905
 Theodore, Augustus J., relief, 326, 620
 Theory of electrostatic planar and spherical probes, 6722
 Theory of stellar spectra, 12975
 Therapeutics:
 experimental therapy, infectious process, USSR studies, 6573
 infusion therapy for patients with deep extensive burns, USSR study, 14275
 radon waters and their uses, USSR study, 8241
 Therapists, *see* Corrective therapists—Manual arts therapists—Occupational therapists—Physical therapists.
 Therapy, *see* Therapeutics.
 Thermal absorption in seeded gases, 12866
 Thermal analysis, *see* Heat.
 Thermal conductivity, *see* Heat transfer.
 Thermal cycling:
 fixture tests bellows reliability through repetitive pressure/temperature cycling, 11448
 stabilizes planar silicon devices, 12902
 Thermal decomposition, *see* Decomposition.
 Thermal distillation of sea water, fundamentals of theory of marine evaporators, 17390
 Thermal energy storage, *see* Energy storage.
 Thermal environment, *see* Environment.
 Thermal expansion, *see* Expansion (thermal).
 Thermal insulation, *see* Insulation.
 Thermal manikins, *see* Manikins (space).
 Thermal protection, materials, sensors to obtain in-flight ablation measurements, 1494
 Thermal radiation:
 black coatings characteristics, effects of simulated space environment, 16980
 production of chloroacetal lesions, study, 10231
 properties, precise determination, procedures, 6921
 property measurement techniques, 9945

Thermal radiation—Continued
 radiant heat transfer in fuel region of gaseous nuclear rocket engine, 5183
 studies of ablating bodies in ballistic range, survey, 5234
 threshold distances for retinal burns from low-yield nuclear detonations, 69
 Thermal shock:
 resistance for built-up membranes, 15584
 resistance of ceramic coating, increases with intergranular metal phase, 6811
 Thermal stresses, *see* Strains and stresses.
 Thermionic converters, diffusion theory, USSR study, 15390
 Thermionic diodes:
 chemical regeneration of emitter surface increases life, 1445
 controlled power system, development, 1433
 Thermionic emission:
 formation of thermions by emitters, USSR study, 4976
 surface preparations improve, 2633
 Thermionic scanner pinpoints work function of emitter surfaces, 1449
 Thermocouples:
 boiler instabilities due to coupling feed system and subcooled region, 9917
 electrically checked while connected to data system, 6785
 fast response measurement of temperatures in cryogenic gases, study, 6820
 installation in hard-to-get-to places, 6813
 junction locations, accurate depth control provided, 6794
 microminiature, monitors own installation, 1460
 modified, effective from -250° to 5000° F, 2626
 multipurpose instrumentation cable provides integral thermocouple circuit, 8391
 parameters of thermogalvanic couples, USSR study, 1241
 sensing disks for slug-type calorimeters, invention for higher temperature stability, 11482
 thermocouple-flexible cable connector insulator is highly reliable, 8403
 wire size and configuration, effect on internal temperature measurements in charring ablator, 6864
 Thermodynamics:
 data—
 Fortran program for calculation, 15566
 molybdenum carbide and tantalum carbide, 1410
 equilibrium in prebiological atmospheres of C, H, O, N, P, S and Cl, 11426
 freezing point depression and heat capacity of soils, relationships, 8878
 hydrate and freezing processes, 6446
 properties of—
 fluids, calculating from empirical equation of state, 9776
 forsterite and serpentine, 11387
 gases, equilibrium, programs for computing, 9598
 hydrates of beryllium sulfate at low temperature, 9777
 liquid metal solutions in sodium-mercury system, 9910
 lithium-aluminum silicates, 14355
 nitrogen gas, zero pressure, 6636
 nitrogen, seeded with alkali-metal vapor mixture, equilibrium at high temperatures, 16974
 potassium to 2100° K, 16999
 saturated liquid parahydrogen charted for important temperature range, 17928
 solid palladium-silver alloys and other alloys investigated by torsion effusion technique, 17924
 van der Waals fluid in 2-phase region, 11379

Thermodynamics—Continued
properties related to expansion of 2-component gas, 11449
relations between thermodynamics, information and thought described, USSR, 1215

Thermoelectricity:
solar direct-energy conversion systems operating between 1.0 and 0.1 astronomical unit, 6856
thermoelectric metal comparator determines composition of metals and alloys, 8387
thermoelectric properties of yttrium-groups 5 and 6 binary and ternary compounds, 16867

Thermography of human dentition, 17357
Thermogravimetric analysis, kinetic parameters of 6 ablation polymers, 9896

Thermogravimetry, dynamic, effect of inorganic salts on pyrolysis of wood, alpha-cellulose, and lignin determined, 8103
Thermoluminescence, *see* Luminescence
Thermometers, resistance thermometer has linear resistance-temperature coefficient at low temperatures, 6775

Thermometry, high temperature, seminar, 129

Thermonuclear reactions, *see* Nuclear reactions.

Thermophysical properties of—
low-density phenolic-nylon ablation material, 14377
saline water systems, 12643
selected gases below 300° K, 6035

Thermoplastics, *see* Plastics.
Thermosetting plastics, *see* Plastics.

Thermostats, phase transitions, use to improve thermostatic control of instruments, 9924

Thermostructural panels, *see* Panels and paneling.

These are yours!, 15815
They need to learn, 7878

Thibau, Patrick A., State legislation and regulations involving ionizing radiation, 7093

Thinning loblolly pine from above and below, 8095

Thiophenes, *see* Butylthiophenes.
Thioscells, *see* Microlepidoptera.

Third International, *see* Communist International.

Third wave, America's new conservation, 8207

announcement and order form, 10035

This is Cooperative Extension, 17328

This is the Army, 1989

This new ocean, history of Project Mercury, 8438

Thixotrophy, suspensions, use of hysteresis loop method to study, 10005, 11679

Thomas, A. M., drawings of micrometer U-tube manometers, 17040

Thomas, Abraham E., soil survey of Grenada County, Miss., 11805

Thomas, Albert, memorial services, 246

Thomas, Charles M., African national developments, 4154

Thomas, Danny, in dramatic motion picture about medical self-help training, announcement of if disaster strikes, 13077

Thomas, David F., jet shoes, extravehicular space locomotion device, 8483

Thomas, John R.:
analysis of 15 μ infrared radiance profile variations over range of meteorological, geographical, and seasonal conditions, 8418

location of reference horizons in earth's horizon radiance profile, 9802

Thomas, Mary F., relief, 7642, 12349

Thomas, Ronald L., turboalternator speed control with valves in 2-spool solar-Brayton system, 5257

Thomas, Rose, relief, 606, 7622

Thompson, Charles J., sulfur compound characterization studies on high-boiling petroleum fractions, 2583

Thompson, Clark S., response of migrating adult salmonids to orifices, etc., 14066

Thompson, Fletcher, contested election, dismissal, etc., report, 12270

Thompson, J. F., aerodynamic characteristics for cone-cylinder-frustum-cylinder configurations, 9804

Thompson, John W.:
addresses, etc.—

June 1, 1966, 12459

Nov. 16, 1966, 4703

economic aspects of unhairing hides at packinghouse, 11934

Thompson, M. C., jr., atmospheric errors in microwave azimuth measurements, 2224

Thompson, William C., dynamic model investigation of rough-water landing characteristics of spacecraft, 9871

Thompson, William H., transportation factors in marketing soybeans, cottonseed, and their products, 16546

Thompson, William M., jr., investigation of response of scaled model of liquid-propellant multistage launch vehicle to longitudinal excitation, 11522

Thompson, William W., jr., job printing shop, 15731

Thompson, Cape, euryhaline copepod genus Eurytemora in waters, 6943

Thoreau, Henry D.:
5-cent commemorative postage stamp—ceremony (remarks), 14611

poster, 11693

Thorium:
fuels for heavy water organic cooled reactor, evaluation, 5764

geologic controls affecting amount in monazite, 17826

uranium and thorium-bearing minerals, glossary, 17819

Thornton, Henry T., jr., field sonoscope tests of concrete, 10-year summary of results, 7934

Thornton, Robert L., high school topic 1967-68, selected excerpts and references, 10698

Thornwall, Joseph C., solid-state wide-range low power camera timer for space applications, 5240

Thorpe, Merle L., production of superheated hydrogen plasma using induction heating of cold plasma and DC plasma enhancement, 5166

Thorson, Kenneth N., Miller Freeman, fishery research of U.S., 11076

Thought:
processes, physico-chemical modeling, USSR study, 1272

relations between thermodynamics, information and thought described, USSR, 1215

Thousand partnerships, 4722

Three-axis attitude and direction reference instrument has only one moving part, 6866

Three-body problem:
restricted—

applicable to new Lie series method of numerical integration of ordinary differential equations, 9877

of celestial mechanics, periodic solutions, 9813

plane circular, closed collision paths, 9922

stellar, application of Krylov-Bogolubov method to solution, 2695

Three-dimensional analysis of tangential yo-yo despin device on rotating body, 6888

Three-phase inverters, *see* Inverters.

Thresher (U.S.S.):
civilians who lost their lives aboard submarine, furnish memorial headstones or markers, hearing, 715

INDEX 1967

Throat, diseases, incidence in 400 space and test pilot candidates, 14781

Thrust:

- ablative-material thrust chambers as components of storable-propellant rocket engines, evaluation, 15555
- augmentation characteristics of jet ejectors, 10290
- bounded magnitude, use of impulsive solution in optimum trajectory problems, 12963
- device measures reaction engine thrust vector deviations, 6804
- high, Jupiter round-trip trajectories, 5233
- low, interplanetary vehicles, celestial-inertial navigation, error analysis, 8424
- vector control, proportional solid propellant secondary injection, 2604

Thrust axis, control during planar ascent from lunar surface to circular orbit by manual method, 1490, 14449

Thrustors, subliming-solid-propellant thrustors systems for attitude control of spacecraft, performance, 6884

see also ion thrustors.

Thulium trichlorides, heats of formation, 6683

Thunderstorm:

- circulations and turbulence studies from aircraft and radar data, 10966
- left moving, Apr. 23, 1964, study, 10965
- motions, heights, and circulation, notes, 6221
- turbulence in clear air, 6222

Thurston, Charles H., relief, 793, 9259, 13501, 13566

Thyroid gland, pathological effects of thyroid irradiation, 11029

TIAS series, 1634-42, 2885-2935, 3978, 5532-52, 7151-93, 8723-50, 10100-104, 11833-874, 13144-154, 14683-689, 15765-804, 17227-249, 18233

TIB series, 15743

Tibet, central, vegetation, Chinese studies, 6555

Ti-chih lun-p'ing (Chinese periodical): translation, 1161

Ticks, eradication activities, 1966 report, 18

see also Fowl ticks.

Tidal waves, *see* Tsunami (tidal wave).

Tide of fortune, 17907

Tides:

- current charts, Charleston Harbor, S.C., 14874
- current tables—

 - Atlantic Coast of North America, 215, 16086
 - Pacific Coast of North America and Asia, 16087

- FORTTRAN program for calculation of hourly values of astronomical tide, etc., 9428
- tables—

 - central and western Pacific Ocean and Indian Ocean, 14875
 - Europe, west coast of Africa, and Mediterranean, 12120
 - North and South America—

 - east coast, 12119
 - west coast, etc., 7555

 - tide observers in seismic sea water warning system, wave reporting procedures, 4412

Tidewater, *see* Tides.

Thibury, R. S., activation analysis with charged particles, 1793

Tiles, wood-brick, for paneling, 14133

Ti-li chi-k'an (periodical): translations, 1317

Ti-li hsueh-pao (periodical): translations, 1274, 4943

Ti-li-hsueh tzu-liao (periodical): translations, 1312

Tillage, alluvial soil in sugarcane area of Louisiana, deep-tillage investigations, 1672

Tillamook County, Oreg., Bureau of Land Management project, analysis of 2 logging road standards, 11118

Timber:

- allowable cut, computer program for calculating by area-volume check method, 8050
- black walnut, planting for timber, 32
- California, timber volume, and commercial forest area, 4859
- damage from drainage at wetland road crossings, 14097
- farm timbers, preservative treatment, 10165
- Federal, need to resolve differences in procedures used by management agencies in appraising timber offered for sale, Forest Service, Indian Affairs Bureau, and Land Management Bureau, GAO report, 4871
- herbage-timber, differences in relationships between thinned and unthinned ponderosa pine stands, 2316
- Maryland resources, 17808
- national forest—

 - buying, 11103
 - sale accomplishments, 9531
 - story of a sale on a national forest, 15868

- national survey cost limit, increase ceiling, report, 10749
- North Carolina, resources, survey, 2338
- owner and his Federal income tax, 10161
- plantation timber, 1965, on island of—

 - Hawaii, 4858
 - Kauai, 16665

- relationship between timber and cattle production on ponderosa pine range, Wild Bill Range, 16652
- southeastern area, State and private forestry, 17798
- stumpage prices for sawtimber sold from national forests (periodical), 3909
- Texas, eastern, 1964 harvest, 2323
- tract development, planning, 11137
- Virginia's timber resources, survey report, 15290
- young-growth stands, slash and litter weight after clearcut logging, 8087

Timberlands, Louisiana pine plantations, fertilization uneconomic for forage improvement, 14117

Time:

- integration of control equations and problem of small time constants, 8505
- leisure, and computer, crisis of modern technology (remarks), 5799
- notation, strip chart recorder, technique, 12912
- variant data analysis, automatic system, 4748
- see also* Hours of labor.

Time deposits:

- and financial flows, 4791
- and savings deposits, changes, 11049, 14039, 16589
- higher reserve requirements, extend act—

 - hearings, 17595
 - law, 17541
 - report, 13816

- insured banks, temporary ceilings on interest rates, report, 648

Time-optimal response of feedback control systems by means of discontinuous rate compensation, 16898

Time series:

- computer programs perform spectral analyses of up to 7 time series, 2661
- economic, X-11 variant of census method II seasonal adjustment program, 5902
- Time signals standard service provided by NBS stations WWV, WWVH, WWVB, and WWVL, 12979

Timers:
dutyable status of imports from insular possessions, amend tariff schedules—law, 509
report, 911
ordnance, symposium, proceedings, 104
solid-state wide-range low power camera timer for space applications, 5240
Timing devices, see Timers.
Timisoara, Rumania, center for technical research, activities, 1191
Timmins, A. R., effectiveness of systems tests in attaining reliable earth satellite performance, 2697
Timmins, Merrill S., jr., fire resistant construction of home, farm buildings, 15849
Timmons, C. O.:
effect of liquid structure on contact angle hysteresis, 9987
study of adsorption of carbon-14 labeled stearic acid on iron, 14595
Timmons, Durward E., instrumentation for isokinetic air sampling at altitude, 67
Tim:
alloy sheet, uniaxial and biaxial fracture toughness, 11552
mineral industry surveys, monthly, 3935
minerals yearbook chapter, 2591
tin-lead solders and solder joints, tests, 11388
Tinker Air Force Base, employees, relief, 296, 565, 813
Tintic Valley, geologic interpretation of gravity and aeromagnetic maps of area, 8164
Tip moths:
heavy attacks reduce early growth of loblolly and shortleaf pine, 14120
Nearctic parasites of genus *Rhyacionia*, key, with species annotations, 16649
ponderosa pine, description, control, etc., 4820
Tip turbine fans, see Turbine fans.
Tiphia, see Wasps.
Tiphidae, see Wasps.
Tippah County, Miss., soil survey report, 1812
Tipplin, Robert B., heavy liquid cyclone concentration of minerals, 12822
Tips, guide to placement of NYC enrollees with epilepsy, 2488
Tips (monetary), see Gratuities.
Tires:
automotive—
manufacture and distribution, economic report, 4798
savings through use of formal advertising in contracting by GSA, GAO report, 9557
cord and fabrics, current industrial reports, 3170
excise tax, impose at manufacturer-owned retail outlet—
law, 360
report, 2094
Federal item identification guides for supply cataloging, supplements, 3285
pneumatic—
and solid, Federal item identification guide, 10896
fore-and-aft stiffness characteristics, 16919
inner tube, Federal item identification guide, 15185
performance on soft soils, dimensional analysis, 16527
pressure distribution curves applicable to, experimental study, 11401
tire research related to safety (lecture), 9046
used motor vehicle, rebuilding by civil agencies, GAO review, 14162
TIROS (television infrared observation satellite), see Satellites.
Tison, James C., jr.:
address, June 16, 1967, 12116

Tison, James C., jr.—Continued
photogrammetric research work on Gulf Stream, 5941
Tissue cultures:
cell tissue and organ culture, 2d decennial review conference, 18172
interaction between polyoma virus and cells of animal tissues in culture, USSR study, 6543
Tissue paper, *see* Facial tissue.
Tissues:
amines, alterations by toxic decaborane-14 and pentaborane-9, modified by hydrazines and propynylamines, studies, 7357
antigens, changes during process of experimental carcinogenesis, 1156
living, effect of chemically inert gases on oxygen consumption, 5708
oxygenation during hemorrhage in dogs breathing 1 and 3 atmospheres of oxygen, 15895
postmortem, and fibrinolytic blood, procurement and utilization, 11289
transplantation, experimental, USSR studies, 9643
Titanium:
alloy sheet, uniaxial and biaxial fracture toughness, 11552
alloys—
chemical milling solution reveals stress corrosion, 16957
in aqueous environments, crack propagation, delayed failure, and residual static strength, 6872
initial load and exposure to moderately elevated temperature effect on room-temperature fatigue life of Ti-8Al-1Mo-1V sheet, 14464
nitrogen alloys, electrorefining, 2582
oxygen alloy system and titanium chlorides in molten sodium chloride, reaction rates, 14359
salt water stress-corrosion cracking characteristics, 17091
Soviet research, 1162
stress-corrosion cracking of Ti-6Al-4V alloy in methanol, 6900
Ti-8Al-1Mo-1V (duplex-annealed) specimens having various widths, fatigue crack growth, investigation, 8494
Ti-8Al-1Mo-1V simulated wing structure, fusion welded, fatigue behavior, 16905
degrading, to minimize stress corrosion, 11476
identification marking, Federal standard, 8008
ingot and mill products, current industrial reports, 3169
mineral industry survey, quarterly, 3936
minerals yearbook chapter, 8380
sandwich construction, edgewise compressive properties at elevated temperatures, 8102
tanks, stress corrosion failure retarded with glass bead shot peening, 14413
titanium and alloys produced with electrolytic methods, 2579
Titanium chlorides, titanium-oxygen alloy system in molten sodium chloride, reaction rates, 14359
Titanium hydride, aluminum-titanium hydride-boron carbide composite provides lightweight neutron shield material, 16878
Titrimetry, *see* Volumetric analysis.
Titus, Joan B., subject index, etc., of technical conference papers on plastics, 981, 17702
Tiwa Indians of Texas, recognize as band of American Indians, report, 14967
To care for him who shall have borne the battle (medical care of veterans), 12318
To choose or not to choose, 17298
To grow the 2d blade of grass, 17332

INDEX 1967

To the first Americans, report on Indian health program of Public Health Service, 11761

Tobacco:

- acreage allotments—
 - facilitate computation—
 - law, 17551
 - reports, 15127, 16274
 - lease and transfer, remove limitation—
 - hearings, 10624
 - law, 12183
 - reports, 10573, 13803
- burley—
 - acreage-poundage referendum, 5677
 - light air cured, market review, 1966, crop, 13888
 - child labor use in Kirgiz tobacco fields, USSR article, 1172
 - commercial farms, costs and returns, North Carolina, Coastal Plain, 13943
 - crop summary, 3938
 - fire-cured and dark air-cured, market review, 1966 crop, 10877
 - fire-cured, etc., acreage allotments, and acreage-poundage quotas, transfer—
 - hearings, 10624
 - law, 13532
 - reports, 10574, 13804
 - flue-cured—
 - market review, 1966 crop, 9354
 - referendum, 14758
 - foreign agriculture circulars, 3345
 - loose leaf and acreage allotments, hearing, 2038
 - Maryland—
 - acreage-poundage quotas, transfer—
 - hearings, 10624
 - law, 9039
 - reports, 7668, 7782
 - light air-cured, market review, 1966 crop, 15177
 - mosaic virus, problem of possibility of infecting animal cells with ribonucleic acid, USSR study, 6486
 - production, marketing, etc., in U.S., 1706
 - products, excise tax exemption by IRS for certain consumers, GAO review, 9554
 - statistics—
 - annual report, 7302
 - summary, 6453
 - stock report, 3940
 - tax guide, 3941, 4919, 11226, 15338, 16724
 - tobacco and tobacco products, trade and tariff information, summaries, 7203
 - tobacco-livestock, commercial farms, costs and returns, Bluegrass area and Pennyroyal area, Ky.-Tenn., 16490
 - tobacco situation (periodical), 3939
 - Tobacco budworms, *see* Budworms.
 - Tobacco Cooperative Stabilization Corporation, flue-cured, *see* Flue-Cured Tobacco Cooperative Stabilization Corporation.
 - Tobago, *see* Trinidad and Tobago.
 - Tobias, Jerry V., table of intensity increments, 136
 - Tocco, Giuseppe, relief, 12220, 13478, 13736
 - Today's science, tomorrow? (remarks), 135
 - Todd, E. L.:
 - neotropical agarinete moths (Lepidoptera: Noctuidae), 5312
 - noctuid moths of American genus *Eusepthis* Hübner, 5306
 - Todd, James A., Jr., relief, 343
 - Todd, Ruth:
 - recent Foraminifera from Gulf of Alaska and southeastern Alaska, 12614
 - smaller Foraminifera from Guam, 1119
 - Togo:
 - amity and economic relations, treaty, 8743
 - labor conditions, 2518
 - Toilet articles, Federal item identification guides for supply cataloging, supplements, 3292

- Toilet bowls, trim for water-closet bowls, standard of trade, 5287
- Toilet paper, suitability of Appalachian woods for sanitary tissue, 8100
- Toilettries, *see* Toilet articles.
- Tokloka, Takasi, Pacific tunicata of United States National Museum, 9950
- Tokyo, Japan, U.S. trade center, 12654
- Tolbutamide, influence on cholinesterase activity of digestive tract, Rumanian study, 1261
- Toledo, Ohio, area wage survey, 11321
- Tolerance (engineering):
 - copper and copper base alloy mill products, Federal standard, 2268, 16601
 - pressure probe compensates for dimensional tolerance variations, 6764
- Tolland County, Conn., soil survey report, 7138
- Tolles, N. Arnold, post-layoff experience of displaced carpet-mill workers, 1390
- Tolls:
 - Montreal/Lake Ontario section, St. Lawrence seaway, agreement with Canada, 11872
 - relationship to Federal-aid highway program—
 - hearings, print additional copies, report, 643
 - report, 14989
- Tomatoes:
 - plants, variations in respiration process during gamma radiation, 8511
 - use of ozone in ripening rooms, 5
- Tombstones, civilians who lost their lives aboard U.S.S. Thresher, furnish headstones or markers, hearing, 715
- Tompkins, Stephen S., parametric study of low-density charring ablator, 2713
- Tones, reproduced photo, slide rule-type color chart predicts, 11436
- Tonga Islands, Geniostoma, description, title page and index, 17048
- Tonto National Monument, general information, 11618
- Tooele County, Utah, geologic interpretation of gravity and aeromagnetic maps of Tintic Valley area, 8164
- Tools:
 - aircraft maintenance, Army technical manual, 4218
 - Marmon clamp installation tool, design, 9860
 - sampling tool to extract cores from baled hay or straw for analysis, 13201
 - tool and die industry, problems, report, 4514
 - welded aluminum jigs and tool structures, heat treatment stabilizes, 2625
 - see also* Cutting tools—Hand tools—Machine tools—Measuring instruments.
- Topographic maps, *see* Maps and charts.
- Topography:
 - air pollution study, 11739
 - lunar, planetary, and solar, Project Tech Top, study, 5163
- Topsoll, loss, slows slash pine seedling growth in Florida sandhills, 14119
- Tornadoes:
 - general description, safety measures, etc., 6230
 - safety rules, 7938, 13992
 - statistics, 6231
 - tornado watch, what it is, how prepared, etc., 4749
- Toroidal rings, *see* Rings.
- Toroidal shells, *see* Shells (toroidal).
- Torphy, Daniel E., effects of short-term bed-rest and water immersion on plasma volume, etc., 7345
- Torque:
 - bearing, and fatigue life studies with several lubricants, 11509
 - measurement of extremely feeble torques on massive bodies, 2696

Torque
rotor
ca
to
er
Torren
ment
strea
Torren
King
Torres
Torre
Torrey
Torric
Torric
Torric
Torric
Torus,
neti
neti
Touche
Touris
Touris
of-ti
Touris
fore
see
Towel
8100
Towel
120
Tower
Town,
bate
o
liber
n
recr
Town
Town
crus
P
Town
mar
Toxic
Toxic
acu
bor
hyc
ma
mo
nev
rad
c
Toxin
Clo
l
Tora
TPI,
hel
per
Trac
ag
in
ro
tr
se
Trac
cu
ra
Trac
m
Trac
ab

Torque—Continued
 rotor air loads, blade motion, and stress caused by transient inputs of shaft torque as related to stoppable rotor operation, 13308
Torrence Marvin G., concentration measurements of injected gas in supersonic stream, 8489
Torrens, Robert C., hops industry of United Kingdom, 8047
Torres, Rafael P. Martinez, *see* Martinez Torres, Rafael P.
Torrey, Volta, science and the city, 6432
Torricelli, AIC 78 B, lunar chart, 7332
Torsion, *see* Strains and stresses.
Tortricidae, *see* Microlepidoptera.
Torus, superconducting, potential and magnetic moment, in nonaxial uniform magnetic field, 9958
Touchet division, *see* Walla Walla project.
Tourism, *see* Tourist trade.
Tourist trade, tourism and recreation, state-of-the-art study, 12937
Tourists, industrial plants offer tours for foreign visitors (remarks), 1959
see also Visitors.
Towelling, suitability of Appalachian woods, 8100
Towels, current industrial reports, 4339-40, 12080, 17455
Tower antenna structures, USSR, 1304
Town, Joseph W.:
 batch and continuous-circuit, beneficiation of western phosphate ores, 9781
 liberation and concentration of phosphate minerals, etc., 14348
 recrystallization of chrome spinel, 9775
Towns, *see* Cities and towns.
Townsend Cromwell (oceanographic ship):
 cruises, trade wind zone oceanography pilot study, 16627-632
Townshend, Jesse F., Jr., airman, official magazine of Air Force, 3019
Toxicity, *see* Poisons.
Toxicology:
 acute hydrazine toxicity in mice, toxicologic studies, 4183
 boron hydrides, 7357
 hydrazine, effect upon renal blood flow, preliminary study, 11967
 manual, USSR, 17882
 monomethylhydrazine, effects upon renal function, 15901
 new industrial chemicals, USSR study, 11284
 radiotoxicological aspects of radioactive contamination, Rumanian study, 2464
Toxins:
 Clostridium—
 bacteria, effect on hemolytic and lecithinase activity, USSR study, 15388
 microbiological studies, 11290
Toya, Theodora, *see* Bezates, Theodora.
TPI, the progress interview, suggestions to help men in management in counseling people about their work, 6373
Trace elements:
 agriculture and medicine, USSR studies, 6542
 in experimental and clinical medicine, USSR book review, 1344
 rock, common types, importance in neutron-induced radioactivity calculations, 1709
 trace characterization chemical and physical methods, 12985
see also subject.
Trace hydrazines in aqueous solutions accurately determined by gas chromatography, 15550
Trace levels of metallic corrosion determined by emission spectrography, 6850
Tracer studies:
 absorption and distribution of C¹⁴ labeled tetramine in relation to its possible use in animal damage control, 4551

Tracer studies—Continued
 compartments, pools, and spaces in medical physiology, symposium, 15959
 ergodic properties of system, 13337
 influence of parent and daughter decay on tracer diffusion profiles, 14489
 krypton-85, development as universal tracer, final report, 13335
 medicine, tracer theory for analysis of whole-system retention data, turnover compartmentalization, 12012
Trachyleberididae, *see* Crustaceans.
Track and field dispute, hearings, 17046
Trackage, Princeton dynamic model track, general description, 7409
 critical task for man-machine research related to operator's effective delay time, 1426, 5174
 electric drive system, low speed, long term, has zero backlash, 14426
 parameter system, human performance measured with version of crossover model, 17944
 probability of target lock-on by automatic ranging during automatic search, USSR study, 11283
 spacecraft tracking and communication, NASA facts, 16922
 system, precision CW laser automatic, investigated, 6791
 USSR satellite tracking equipment, description, 9611
 vestibular system and human dynamic space orientation, 1428
see also Radar tracking—Infrared Acquisition and Tracking System.
Tracking stations:
 agreement with—
 Great Britain, 2911, 5536, 8750
 Spain, 11833
 Antigua, agreement with Great Britain, 8749
 facility on Island of Mahé (Seychelles), agreement with Great Britain, 11847
Tractor loaders, *see* Loaders (mechanical).
Tractors:
 current industrial reports, 3169, 5875-76
 except garden tractors, current industrial reports, 16004
 farm, demand in United States, regression analysis, 2169
 Federal item identification guides for supply cataloging, supplements, 3285
 truck tractors, commercial, standard models and special equipment requirement, military standards, 15190, 15192, 15195-196
 USSR industrial development, tractor industry, translations, 4015
see also Farm implements and machinery.
Tracy, F. H., layouts and operating criteria for automation of dairy plants manufacturing ice cream and ice cream novelties, 1702
Trade, *see* Commerce—Retail trade—Service trades—Wholesale trade—*also* names or classes of commodities.
Trade agreements, *see* Commercial treaties.
Trade centers:
 U.S., Frankfurt, London, Milan, Stockholm, Bangkok, Tokyo, 12654
 U.S., Stockholm, Sweden, Mar. 30-Apr. 7, 1967, 4921
Trade expansion act of 1962, *see* Commercial treaties.
Trade fairs, *see* Fairs.
Trade marks, *see* Trademarks.
Trade missions, sell your products with business proposals carried abroad by U.S. trade missions, 6466
Trade Negotiations, Office of Special Representative, *see* Special Representative for Trade Negotiations.
Trade policy, *see* Commercial policy.

INDEX 1967

Trade practices:
 medical restraint of trade act, hearings, 17661
 rules, proposed, 3779
 unfair, affecting producers of agricultural products, control—
 hearings, 10800
 report, 15086
Trade unions, see Labor unions.
Trade wind zone oceanography pilot study.
 Townsend Cromwell cruises, etc., 16627-632
Trademarks:
 cases, appeals, amend U.S. Code, report, 877
 code of Federal regulations, 9477
 decisions, weekly, 3650
 decisions, yearly, 1966—
 departmental edition, 8606
 document edition, 7597
 index, 10021
 international cooperation imperative (address), 5370
 law, revision, subcommittee work, reports, 9285, 13789
 lists, in official gazette, 3650
 publications, price list, 5418
 questions and answers, 14602
 trademark reform legislation on international and national level (address), 14604
 U.S. customs information, 10884
Trades, see names of trades and types of workmen.
Tradesman, 1 & C, Navy training course, 11665
Trading with the enemy:
 act, amend, hearing, 741
 administration of act, investigation—
 extension, report, 4622
 report on findings, 13831
Traffic:
 accuracy of traffic assignment when using capacity restraint (paper), 5478
 carload waybill statistics, 1964, commodity classes, 6473
 international maritime, convention on facilitation, report, 6905
 piggyback characteristics, 8233
 St. Lawrence Seaway report, 8673
 traffic systems, research and development, program review meeting, proceedings, 11767
see also Air traffic—Transportation.
Traffic control, see Air traffic.
Traffic decisions, see Interstate Commerce Commission.
Traffic safety, see Safety of life.
Trailblazer, see Rockets.
Trailers:
 cargo trailer, rigging for airdrop, 15949
 current industrial reports, 3169
 District of Columbia registration, facilitate addition of name of spouse of owner—
 law, 12178
 reports, 13640, 12382
 Federal item identification guides for supply cataloging, supplements, 3285
 house, and mobile dwellings, uniformed services members, provide transportation costs, amend U.S. Code, reports, 629, 657
 irrigation pipe trailer, farm building plan, 1707
 M101, $\frac{3}{4}$ -ton cargo trailer, rigging for airdrop, technical manual, 8888
 piggyback, heavier loading for watermelons, damage and cost reduction study, 10154
 temperatures, relative humidity, and atmosphere composition in trailer loaded with lettuce, 15825
 truck, current industrial reports, 12082
Trails:
 for America, report on nationwide trails study, 5367

Trails—Continued
 nationwide system, establish, hearings, 9320, 10657
 Trainee's guide for electronics technicians, class C, AN/SRC-20, AN/SRC-21, radio sets, 8582
Traineeships:
 grants for advanced training of allied health professional personnel, law, 463
 professional health personnel under public health program, 15713
 Public Health Service awards, 1966 funds, 7086
Training:
 adroit training glide, Naval Reserve Fleet Divisions, etc., 7017
 cuing techniques, 15635
 community work and training program, message from the President, 7606
 enactments, 89th Congress, 2d session, 6121
 Federal employees, task force report, 7046
 annex, 10030
 Government employees training act, 1958, implementation, effectiveness, report, 10619
 homemaker-home health aide in personal care, 15714
 laws, text, 6122
 major programs providing Federal funds for employment and training, 17416
 manpower development and training act—
 amendments of 1966, law, 496
 as amended, resources, utilization, etc., 1350
 earning's mobility of MDTA trainees, 11296
 good training, good jobs, MDTA Detroit Skills Center, 16500
 handbook chapter, training project development, 15221
 report of Secretary of Health, Education and Welfare Dept., 9578
 summary, 6594
 medical, in Veterans Administration, major contribution to Nation's health resources, 8782
 medical training costs too much, 10934
 methods in vocational rehabilitation services, report, 11893
 needs of States and local governments in water pollution control, report, print as Senate document, report, 16362
 northwest training centers and programs, provide central location, hearings, 15156
 oceanographic and hydrographic systems, 11670
 Peace Corps advance training, program for college juniors, 5373
 personnel, PACAF basic bibliographies, 10230
 professions, opportunities for women, selected readings, 1669
 programs, impact on public assistance case-loads, 3406
 Public Health Service grants, 1966 funds, 7086
 team training, 18109
 training and demonstration projects, 2973
 training and technology (TAT) in Tennessee, new skills for underemployed, 16792
 work experience and training program for unemployed, 12482
see also Education—Employees training—Military education—Naval education—Vocation education—also subjects.
Training aids, see Training devices.
Training Center, Financial Management and PPBS, see Financial Management and PPBS Training Center, CSC.
Training devices:
 and aids, Federal item identification guides for supply cataloging, supplements, 3293

Training devices—Continued

- guide, Naval Training Device Center, 8600 revised pages, 15639
 naval training equipment and individual differences, study, 9980
 tactical decision making skills, generalized, research, 9982
 training devices developments (Navy periodical), 18115
 Training Materials and Aids Committee, Institute on Rehabilitation Services, report, 11893
 Training of employees, *see* Employee training.
 Trains, *see* Railroads.
 Traits of character, *see* Character.
 Trajectories:

- analysis, papers, compilation, 12881
 atmospheric, of 413 precisely reduced photographic meteors, analysis, 18204
 ballistic, minimal energy, for missions to Mercury, 9886
 ballistic reentry, at velocity of 50,000 f.p.s., 12932
 endpoint problems, computer program for mass optional solutions, 16953
 Jupiter high-thrust round-trip, 5233
 lunar, minimum fuel ascent from surface, 16994
 meteoric, automatic-reduction procedure for photographic data, 15510
 optimal, explicit solution for Lagrange multipliers on singular subarc, 16982
 optimal, treating with restricted segments, 9805
 optimization for Apollo-type vehicle under entry conditions encountered during lunar return, 9919
 optimum, problems, with bounded thrust magnitude, use of impulsive solution, 12963
 optimum transfer, between 2 terminal points for minimum initial impulse under arbitrary initial velocity vector, 1427
 PRESTO, program for rapid earth-to-space trajectory optimization, 5157, 5178A
 PRESTO II, digital computer program for optimization, 6717
 RONDOVU/PRESTO, program for rendezvous mission optimization, 5179
 round-trip, to moons of Jupiter, 18017
 space trajectories program for IBM-7090, 15524
 space vehicle flight control systems, analysis and design, equations, 12872
 STOP, computer program for supersonic transport optimization program, 11415
 use of Jupiter gravity turns for tailoring trajectories to Saturn with consideration of launch opportunities, 2692
see also Lagrange multipliers.
 Tran Van Nguyen, relief, 13774
 Tranquillity, Calif., early skeletons, 1531
 Trans World Airlines, Inc., aircraft accident, 4370
 Transcribers, confidence in relation to accuracy, 5751
 Transducers:
 dynamic-pressure, system enables more complete calibrations, 9854
 electromechanical pressure, performance-testing, methods, 6923
 force, resonance, damper reduces effects, 5216
 heat flux, long duration, theory, etc., 6777
 measures embedment stresses in electronic modules, 17978
 piezoelectric, mechanical and electrical checkout while installed in system, 2658
 pressure, automated tester permits precise calibration from 0 to 1050 psi, 15493
 respiration rate, for aircraft environments, development, 18044

Transducers—Continued

- strain gage pressure, life cycling test, 18083
 Transformations (mathematics):
 discrete finite Fourier transforms, tutorial approach, 15638
 group method, utilized in solid propellant rocket motor performance computer programs, 1483
 Transformers, *see* Electric transformers.
 Transient analysis generator (TAG) simulates behavior of large class of electrical networks, 16954
 Transistors:
 and silicon controlled rectifiers used by pulse generator produces high current pulses with fast rise and full times, 1455
 computer program searches characteristic data, 2654
 field effect—
 equivalent circuit for computer simulation, 6644
 improve buffer amplifier, 17961
 insulated gate, multiplexer uses, 18001
 micropower logic circuits, improved, 14461
 one-transistor circuit boosts pulse amplitude, 1464
 space radiation equivalence for effects on transistors, 14580
 transistor biased amplifier minimizes diode discriminator threshold attenuation, 16883
 Transit systems, *see* Local transit.
 Transition elements, in ultra pure alkali metals, solubility studies, 1424
 Transitions:
 boundary-layer, on cooled 7.5° total-angle cone at Mach 10, 18021
 fixing for hypersonic flow, 18011
 Translating machines, scientific documentation sponsor by NSF, price list, 6916
 Translations:
 medical, bibliography, annual index, 14526
 National Institutes of Health—
 index, 1966 supplement, 15700
 Library, selected list, 3809
 neural sciences, bibliography, 17137
 price lists, selective bibliography of Government translations, lists, 1953
 special foreign currency science information program, 1967 list in process, 7551
 supplement, 17464
 technical, National Aeronautics and Space Administration, 5276-77, 6911-12, 8509-512, 9920-28, 11560-573, 12972-976, 14500-504, 15582, 17017, 18057
 technical translations, bibliography (periodical), 3933
 Translator program converts computer printout into Braille language, 11441
 Transmission lines, *see* Electric lines.
 Transmissions:
 atmospheric, of infrared radiation from 2-5 microns for slant paths from 35,000 ft. to upper limit of atmosphere, survey, 12931
 helicopter, using solid lubricants, investigation, 8897
 quantum effects in information transmission systems, 18057
 Transmittances, infrared spectral, of inhomogeneous gases, calculation, 5218
 Transmitters, VHF-UHF, dual-channel, for Gemini experiment D-14, 10004
 Transonic flow, *see* Flow.
 Transpiration cooling, *see* Cooling.
 Transplantation (physiology):
 organs and tissues, experimental, USSR studies, 9643
 Transplants, *see* Grafting (physiology).
 Transport aircraft, *see* Aircraft.
 Transport airplanes, *see* Airplanes.
 Transport equations, *see* Equations.

INDEX 1967

Transport of electrolytes through membrane systems, 15332
 Transport properties:
 high temperature gases, experimental determination, 11412
 ionic transport of polystyrenesulfonate model membranes, 9592
 radiation transport and biological effects, special sessions, proceedings, 13314
 wicks, vapor-chamber fin studies, 14379
 Transport vehicles, see Vehicles.
 Transportation:
 agricultural cooperative, issuance of certificates of exemption on application and proof of eligibility, hearings, 947
 air—
 and water, south-central Alaska, 1964 earthquake effects, 12609
 Army transport operations, 11986
 integrated program of movement of persons on ground, in terminals, and through air (remarks), 8974
 provided by Defense Dept. for dependent children of personnel, GAO review, 9545
 regulate and promote (address), 8968
 supplies and equipment, external-transport, procedures, Army technical manual, 8894
 United States, today and tomorrow (address), 7523
 airlift and sealfit to South Vietnam, report, 10809
 Alaska earthquake, Mar. 27, 1964, effects on transportation, communications, and utilities (series), 6402, 12609
 allowances, uniformed services members for dependents' schooling—
 hearings, 10636
 reports, 10569, 12245
 Army regulations, 4194, 14790
 busing school kids to suburbs, 10928
 census 1963—
 commodity transportation survey—
 commodity groups, 1856, 7472
 shipper groups, 1855
 shipper groups and production areas, 7473
 final volumes, 1855-56, 4302, 7472-73
 motor carrier survey, 4302
 passenger transportation survey, 10343
 civilian personnel, temporary duty, general information, etc., handbook, 6143
 code of Federal regulations, 6296, 9484-85, 11047
 commodity classification for transportation statistics, 18352
 coordination of unlike modes, under Federal aviation act (remarks), 1898
 costs of transporting food donated for overseas distribution, GAO review, 9550
 defense depot, procedures, manual, change, 6145
 defense, Military Traffic Management and Terminal Service, 16731
 defense traffic management handbook, 10889
 change, 6142
 economics, monthly comment, 3973
 index, 9605
 factors in marketing soybeans, cottonseed and their products, 16546
 Federal agencies, GAO guidance manual, 3570
 high speed ground, research and development, report of panel, 13469
 highway, task and study statements of national program for research and development, 8664
 House Members, provide reimbursement of expenses—
 law, 17540
 reports, 14968, 15138
 household goods, savings on volume movements from overseas to continental U.S., Defense Dept., GAO report, 8138

Transportation—Continued
 HUD's urban programs help urbanites move into 21st century, 17837
 industry, growth and prosperity vital for all (remarks), 1951
 inter-modal system, containerization concept for moving shipments (remarks), 7968
 international traffic of radioactive materials, 7432
 international waterborne, convention of Mar del Plata, report, 6065
 laws, compilation, 1990
 lines—
 Atlantic, Gulf, and Pacific Coasts, 13984
 Mississippi River system and Gulf Intracoastal Waterway, 2219
 liquefied hydrogen and helium, USSR study, 15403
 marketing and transportation situation, 3543
 mass transit, subsidy proposal for District of Columbia, hearing, 12293
 migratory birds, 1967-68 Federal regulations governing, 16623
 Alaska, 14061
 military standard transportation and movement procedures, training program guide, 1763
 milk, bulk and packaged, costs of transporting by truck, 8836
 MILSTAMP, military standard transportation and movement procedures, introduction, 6150
 MILSTEP, military supply and transportation evaluation procedures, 13925
 NASA's mammoth transportation problems, rockets, etc., 9932
 National Capital transportation act of 1965, amend, hearings, 15021
 national policy (remarks), 8973
 Northeast Corridor project, design for impact studies, 1935
 ocean, faces challenge at home and abroad
 publications, price list, 10038
 railroads—
 computer engineering, USSR study, 1173
 meteorological servicing, USSR study, 1182
 recent trends (remarks), 236
 schoolchildren in D.C., reduced fare, increase age, report, 16380
 shifting emphasis and its implications for research (remarks), 4451
 sick and wounded, Army field manual, 100
 State and regional defense airlift planning, change, 9447
 statistics in United States, annual report, 3974, 4929, 8236, 12657, 16729
 systems, benefit-cost analysis, 1525
 transportation proceedings (periodical), 7407
 transportation series, Engineer Corps, 2219, 13984
 troop movement guide, Army technical manual, 17387
 urban mass, study, expenses, reports, 4594, 4625
 urban mass transportation act of 1964, emergency provisions, temporary extension—
 law, 13522
 reports, 12888, 13634
 urban mass transportation amendments of 1966, reports, 620, 628
 urban, need for improvement (remarks), 9583
 urban public, selected references, 2385
 urban, trip generation analysis, guidelines, 15718
 urbanized area planning programs, directory, 17175
 USSR, translations, 3972
 worldwide cargo transportation costs guide, Army Dept. pamphlet, 17380

Transportation—Continued
 your business partner, transportation (remarks), 9751
see also Air carriers—Carriers—Local transit—Motor carriers.
 Transportation analysts, career opportunities with Civil Aeronautics Board, 17448
 Transportation Department :
 appropriations, 1968—
 amendments, 10521
 hearings, 12286, 16389
 law, 17557
 reports, 13666, 16373
 budget, 1968, amendments, 10513, 16350
 creation and functions (remarks), 1962
 establish—
 law, 389
 remarks, 1952
 report, 906
 natural gas pipelines, prescribe safety regulations, hearings, 16403
 organization and functions, 17264
 possible impact on air transport (address), 17449
 report on highway safety standards, 15048
 Secretary, nomination of Alan S. Boyd, hearing, 9310
 transfer certain functions relating to ship mortgages to—
 hearings, 9159, 10849
 message from the President, 7598
 Transportation of school children, *see* Transportation.
 Transportation tariff examiners, examination announcement, amdt., 1915
 Transportation Workers Union of America, AFL-CIO, emergency board report, 4724
 Transuranium elements, scientific research, dedication of new facilities at ORNL (remarks), 1815
 Transuranium Processing Plant, dedication (remarks), 1815
 Transuranium Research Laboratory, dedication at ORNL (remarks), 1815
 Trap nests, *see* Nests.
 Traps, *see* Insect traps—Pollen traps.
 Traumas, *see* Injuries.
 Traumatism, conference on trauma, report, 7087
 Travel :
 allowances, uniformed services members for dependents' schooling—
 hearings, 10636
 reports, 10569, 12245
 Army military personnel, dependents to overseas areas, information, Army pamphlet, 1765
 Army regulation, 4194, 14790
 authorization, Agriculture Committee, House, report, 12281
 bright future of Pacific travel as foundation for bringing peace, order, and progress to world (remarks), 9022
 civilian personnel, temporary duty, general information etc., handbook, 6143
 controls, report, 688
 directions, U.S.A., entry travel, shopping, etc.—
 German edition, 15814
 Portuguese edition, 15813
 expenses—
 applicants for Federal employment, hearing, 17602
 Government employees on official business, increase allowances, hearing, 16331
 payment for Foreign Service, etc., employees in high-risk situations, 10768
 rules for deducting from income tax, 2410
 health information—
 Asia, etc., Australia and New Zealand, 13078
 Europe, 13079
 Mexico, Central and South America, and Caribbean, 13080

Travel—Continued
 industry growth (address), 9009
 international travel to America, promoting (remarks), 16109
 international visitors to U.S., plant tours, 11888
 interstate or foreign, to incite riots, penalties, amend U.S. code—
 hearings, 15165, 16419
 reports, 12282, 13664
 joint regulations—
 Defense Department civilian personnel, 3456
 uniformed services, 3455
 market survey, travel to United States from—
 France, 5580
 Mexico, 5581
 United Kingdom, 5582
 West Germany, 5583
 new doors to pleasure through air transportation (remarks), 1900
 new world, *see* U.S.A., 1658-59
 Pacific area, planning for future expansion (remarks), 8975
 passenger, between U.S. and foreign countries, 3822, 4910, 12633
 regulations, Foreign Service, revision needed to reduce per diem costs, GAO report, 15298
 safety for ocean traveling public and seamen (remarks), 6258
 space, physiological measurements, USSR study, 8243
 trip generation analysis, guidelines, 15718
 United States, travel a new world, *see* U.S.A., map, 13170
 Traveler/El viajero, quarterly newsletter for migrant and seasonal farm workers, 7879
 Travelers, you can assist balance of payments, 11887
 Travertine, *see* Calcium carbonate.
 Travieso y Perez, Lucio A., relief, 12342, 16213, 17514
 Trawls and traveling, trawl nets, North Atlantic, 15256
 T aylor, Harlon D., costs of drying and storing rough rice in Louisiana and Texas, 15864
 Trays :
 ashtrays and lighters for automotive vehicles, Federal standard, 6327
 new overwrapped trays for McIntosh apples, 1674
 Treasure County, Mont., soil survey report, 10089
 Treasures from Cooper Union Museum, 12990
 Treasury bills, department circular, 13166
 Treasury Department :
 appropriations, 1968—
 amendments, 10695
 hearings, 6027, 10806
 law, 13529
 reports, 9097, 10791, 13658
 bulletin, 3976
 code of Federal regulations, 6285
 collection of Confederate records, preliminary inventory, 18074
 customs bulletin, weekly, 3174
 daily statement, 3183
 decisions—
 bound volumes, 2958, 17273
 weekly report, 3977
 department circulars, 2947, 5569, 7207, 8770-72, 10118-119, 13166, 15811, 17266-267
 public debt series, 2948, 5570, 7208, 8773, 13167-169, 15812
 foreign exchange operations, 8005, 16599
 law enforcement agencies, career opportunities, 5575
 management improvement progress, report, 5572
 meeting with officials, hearings, 9150
 press releases, 3765

INDEX 1967

Treasury Department—Continued
public regulation of business, viewpoint (remarks), 11884
report, 1966—
departmental edition, 13164
document edition, 12196
transfer of silver to national stockpile—
law, 12171
reports, 10602, 10765, 12248
unemployment taxes, benefits from quarterly collection, GAO review, 8135
withdrawal of cash from, for advances under Federal programs, 7207
working capital fund, establish, report, 9090
Treasury notes:
4½ percent, series C-1968, 13168
4 percent—
series A-1962, 7209
series B-1968, 7208
series B-1972, 13169
5½ percent, series D-1968, 15812
5 percent, series B-1971, 2948
5 percent, series A-1968, 5570
payable in foreign currency—
law, 513
law, summary, 9177
legislative history, 7762
report, 702
Senate amendments, summary, 4567
Treasury savings notes, general information, department circular, 8773
Treaties:
and agreements of interest to Navy, compilation, 11291
collective defense, compilation, 7743
general interest, summary, 89th Congress, 4572
in force, list, 7194
non-proliferation treaty, why? 15926
treaties and other international agreements, 14691
see also Commercial treaties—also names of countries—also subjects.
Treaties and other international acts series, 1634-42, 2885-2935, 2978, 5532-52, 7151-93, 8723-50, 10100-104, 11833-874, 13144-154, 14683-689, 15765-804, 17227-249, 18233
Treaties on Socialist Turkey, 5027
TRECUM technical report, 8895
Tree nuts, see Nuts.
Tree planting:
scrub oak areas after site preparation with heavy equipment, 8112
slash pine, Florida, summer planting shows promise, 8118
tree planters' notes, 1099, 8125-27
Tree seeds, see Seeds.
Trees:
accidents caused by hazardous trees on California recreation sites, 11125
Alaska, specific gravity of increment cores, 4835
color of green with trees, calendar of activities for home arborists, 5676
dealers in seeds and planting stock, directory, 8125
death of a giant, dutch elm disease still takes its toll, picture story, 15872
forest, plant-parasitic nematodes, world distribution, 16645
forest, tree improvement research in South and Southeast, 9542
genetics and breeding of forest trees, bibliography, 4827
heartwood of native species, comparative decay resistance, 8065
height-diameter curves for tree species subject to stagnation, 2311
mean-growth, accuracy of estimates made with dial-gage dendrometers, 8079
pioneer search for better kinds for Northwest Wind River Arboretum, 14147
sampling tree tops by helicopter, 11123
transport of intercepted snow from trees during snow storms, 8114

Trees—Continued
visible dormant buds as related to tree diameter and log position, 17802
see also Christmas trees—Tree planting—also names of trees.
Trefoll, production for pasture and hay, 14741
Trematodes, see Plukes.
Trends in educational attainment of women, 7239, 14726
Trends in savings and loan fields, 16574
Trenton, N. J., area wage survey, 8313
Treves, S. B., Carney Lake Gneiss, 6398
Trezevant, Walter S., analysis of electrical instrument shipments, 1826
Triangulation, see Geodesy.
Triassic period, Upper, and Triassic (?) formations between southwestern Utah and southern Nevada, correlation, 6393
Triaxial equipment, duty-free entry, for Northwestern University, 617, 7653, 14889, 16357
Trichlorides, see names of trichlorides.
Trilobites:
calymenid and other Ordovician, from Kentucky and Ohio, 16698
Middle Ordovician, from basin ranges, western U.S., 11174
Trimble, LaValle T., how to get money for college, 16501
Trimble, Paul E., nomination, hearings, 6094
Trinidad and Tobago:
agricultural production, indices, 4700
amateur alien radio operators, authorization to operate, agreement, 15774
income-tax convention—
hearing, 17651
report, 17620
text, etc., 6063
Trinity County, Calif., erosion and deposition produced by flood of Dec. 1964 on Coffee Creek, 17823
Trip generation, see Travel.
Triplax, see Beetles.
Tripp, John S., algorithm for synthesis of asynchronous sequential circuits, 1473
Tripp, Patricia A., see Paeng, Mi Kung.
Trips, see Travel.
Trips, slips, and falls, occupational safety aid, 9708
Trisphere spark gap actuates overvoltage relay, 2671
Tri-States Construction Co., Inc., relief, 329
Trinitated alumina serves as reagent for self-labeling analysis, 16888
Tritium, quantitative determination in natural waters, 1130
Tritons, energy required to produce electron-hole pair in silicon, 1501
Troops, see Armed Forces—Army.
Trophies, National Guard Bureau, Eisenhower trophy to outstanding unit of company size, announcement of winners, 14523
Tropics:
Atlantic Ocean, seabirds, identification manual, 2752
balance equation, experiment in use in tropics, 9429
corrosion of metals, 9993
Troposphere:
radio duct meteorology at VHF and UHF in theory and as observed on trip around world, 1551
turbulent, effect on parameters of linear array antenna, USSR study, 5018
UHF wave propagation, 6508
upper, motions as revealed by satellite-observed cirrus formations, 9430
Trouble shooting, complex system, solid state annunciator facilitates testing, 2640
Trousers:
making pants longer or shorter, 7289
make waistline fit on pants, 7282
tapering pants, 7281
Trout, David L., effects of hydrazine on fat transport as affected by blood glucose concentration, 65

Trout, E. Dale, X-ray machine simulator, 18191
 Trout:
 brook trout of Great Smoky Mountain National Park, 17787
 hepatoma research conference papers, 11090
 response of migrating adult salmonids to orifices, etc., 14066
 Trowbridge, Alexander B.:
 addresses, etc.—
 Nov. 2, 1966, 234
 Nov. 3, 1966, 227, 245
 Feb. 6, 1967, 5948
 Feb. 28, 1967, 5960
 Mar. 2, 1967, 5957
 Apr. 8, 1967, 7581
 Apr. 17, 1967, 7569
 Apr. 24, 1967, 9022
 May 1, 1967, 9023
 May 13, 1967, 10450
 May 16, 1967, 10454
 May 17, 1967, 10449, 10466
 May 21, 1967, 10471
 May 22, 1967, 10467
 June 2, 1967, 10451
 June 5, 1967, 10468
 Spanish edition, 10464
 June 27, 1967, 12126
 Sept. 8, 1967, 16095
 Sept. 11, 1967, 16094, 16096
 Sept. 20, 1967, 16109
 Sept. 29, 1967, 16092
 Oct. 6, 1967, 16093
 Oct. 19, 1967, 17469
 nomination, hearing, 12406
 Troy, N.Y., area wage survey, 12772
 TRU (transuranium processing plant), *see* Transuranium Processing Plant.
 Trubey, D. K., proceedings of special sessions on radiation transport and biological effects, 13314
 Trucial States, foreign trade regulations of Arabian Gulf States, 17480
 Truck tractors, *see* Tractors.
 Truck trailers, *see* Trailers.
 Truckee, Calif., earthquake, Sept. 12, 1966, effects, 9565
 Trucking, *see* Motortrucks in freight service.
 Trucks, commercial, standard models and special equipment requirements, military standards, 15190, 15192, 15195-196
 see also Firefighting vehicles—Hand trucks—Motortrucks—Power trucks.
 True, Arthur W.:
 economics of agriculture of foreign countries and U.S. foreign agricultural trade, selected list of publications, 993
 economics of agriculture, reports and publications of USDA's Economic Research Service, 13947
 Truman, Harry S., *see* President of United States.
 Trunklines, *see* Air carriers.
 Trusses:
 moisture cycling of trussed rafter joints, 8101
 open-face truss-core sandwich panels, compression tests, 5255
 Trust funds, *see* Trusts and trustees.
 Trust Territory of Pacific Islands:
 administration, report to United Nations, 5529, 11830
 annual report, 12638
 continue civil government, increase appropriations—
 hearing, 7812
 law, 10485
 reports, 7702, 7710, 9134, 9265
 status, message from the President, 16157
 Trustees of posterity (address), 15877
 Trusts (Industrial):
 antitrust field, Congress and monopoly problem, 1890-1966, history of congressional action, 4561

Trusts (Industrial)—Continued
 antitrust laws—
 administration, investigation—
 authorization, report, 4617
 subcommittee activities, report, 9293
 balance of payments voluntary agreements, safeguarding U.S. position, exemption from antitrust laws, extend—
 law, 14906
 reports, 13647, 13674, 13811
 1890-1966, compilation, 1978
 football merger, authorize—
 hearings, 742
 law, 504
 law, legislative history, 2064
 law, summary, 4566
 Senate amendments, summary, 4568
 medical restraint of trade act, hearings, 17861
 price discrimination legislation, hearings, print additional copies, reports, 916, 2030
 economic concentration, concentration and divisional reporting—
 Fortune directory of 500 largest U.S. industrial corporations, 1954-65, hearings, 12415
 hearings, 6116
 income tax treatment of treble damage payments under antitrust laws, make nondeductible, hearings, 7820
 international aspects of antitrust, hearings, 7818, 13874
 Justice Department antitrust activities, review, 8280
 Sherman antitrust law, amend, hearing, 7817
 Trusts and trustees:
 highway trust fund—
 beautification program financing, authorization, hearings, 12311
 financial condition and operations, annual report, 9059
 legal investments for trust funds in D.C., list, 6157, 15201
 OASDI trust funds, additional earnings from 1960 interest rate amendments, 7116
 trust indenture act of 1930, releases, SEC, 3979
 see also Charitable trusts—Deeds of trust.
 Truth in lending act, *see* Credit.
 Trypanosoma cruzi, tumorotropicism as basis for biotherapy of cancer with cruzin, USSR study, 6548
 Trypanosomiasis, cure for Chagas disease discovered, Brazilian study, 11243
 Tsai, Stephen W., composite structures, 2602
 Tsaidam, deserts, description, 16777
 Testlin, M. L., Soviet scientist, biography, 1330, 2480
 Tsifutis, Argyrios A., relief, 553
 Tsunami (tidal wave):
 earthquake of Mar. 27, 1964—
 Kodiak and nearby islands, effects, 1121, 11176
 Seward, Alaska, effects, 11175
 Hilo Harbor barrier, steady-flow stability tests of navigation opening structures, 2220
 seismic wave propagation, 12118
 stability of rubble-mound barrier, Hilo Harbor, Hawaii, 16526
 wave reporting procedures for tide observers in seismic sea wave warning system, 4412
 Tulare project, construction, report, 652
 Tuberculosis:
 avian tuberculosis in hogs, 14755
 reported data, 14635
 Yakut Scientific and Research Institute of Tuberculosis, meeting, 1333
 Tuberculosis in animals:
 bovine, eradication in cooperation with States, summary, 8813

INDEX 1967

Tuberculosis in animals—Continued
eradication in cooperation with States,
summary, 3915
eradication, State-Federal cooperative
program, progress report, 7251

Tubes:

aluminized thin-window proportional-
counter tube is stronger, more re-
sponsive in long wavelength region,
8451
conference on production of various types,
Hungary, 9634
ductile mandrel and parting compound fa-
cilitate tube drawing, 5156
Federal item identification guides for sup-
ply cataloging, supplements, 3288
flared, roundness, and concentricity, me-
chanical gage checks, 6816
flares, gage tests quickly and accurately,
5210
heat exchanger, supported in high vibra-
tion environment, 5220
horizontal, sodium-potassium-cooled, heat-
transfer of nonwetting, condensing mer-
cury flow, experimental investigation,
11541
metal, can be folded for compact stowage,
is self-erecting, 1452
metal tube reducer is inexpensive and sim-
ple to operate, 17932
metallic, Federal item identification guide,
10893
orbital tube flaring system produces tub-
ing connectors with zero leakage, 8454
plastic tubing protects flexible copper hose,
6755
roughening increases heat transfer capa-
bility, 6773
seamless, production, USSR study, 2467
silver plating technique seals leaks in thin
wall tubing joints, 6699
single thermal and hydraulic performance
of potassium during condensation,
15506
small diameter refractory tube drawing,
hydraulic fluid serves as mandrel, 5151
space tubing reduces cost of telescoping
bridge crane hoist, 17920
steady-state performance of 7-tube potas-
sium condenser, 12937
straight and curved, heat transfer to cryo-
genic hydrogen flowing turbulently at
high heat fluxes, 6713
tungsten tubing, thin-wall, extrusion of
 $\frac{1}{8}$ - and $\frac{1}{4}$ -inch diameter, using floating-
mandrel technique, 5250
vertical, freon-113 condensing in down-
ward flow, local heat-transfer and pres-
sure distributions, 11510
see also Electron tubes—Image tubes—*al-*
so names of metals, etc., of which tubes
are made.

Tubes (inner), *see* Inner tubes.

Tublash, Haskell S., ornamental use of star-
fishes, 6346

Tubing, *see* Tubes.

Tubipora musica, *see* Corals.

Tucker act (28 U.S.C., 1346 (a) (2)), *see*
District Courts.

Tucker County, W. Va., soil survey report,
11812

Tucson, Ariz.:
area, urbanization and mineral aggregate
industry, 5105

National Advisory Commission on Rural
Poverty, hearings, 15668

population, special census, 10368

Tufted textile products, current industrial
reports, 7481, 16005-6

Tufts University, rheogoniometer, duty-free
entry, 7647, 13775, 14901

T'u-jang Chuan-pao (periodical):
translations, 1211

Tularemia, influence of intermittent 98 per-
cent oxygen and 380 mm. Hg. total pres-
sure on host susceptibility, 5715

Tule Lake National Wildlife Refuge, birds,
list, 15262

Tuliptree:

diameter distributions in natural yellow-
poplar stands, 5544
short-term storage of yellow-poplar, soft-
wood cuttings, 11131
yellow-poplar in New Jersey and Maryland,
treatments needed to regenerate, 17804
Tullios, Tommie J., management (excluding
personnel), PACAF basic bibliographies,
10228
Tully, P. C., vapor pressure of pure liquid
nitrogen, 6639

Tumors:

alimentary tract in Africans, symposium,
14632
and infectious virus interaction, quantita-
tive aspects, USSR study, 6580
atlas of tumor pathology, 15181
brain tumor cells, morphology, USSR
study using anoptal microscope, 12739
brain, uranyl phthalocyanines show pro-
mise in treatment, 12842
endocrine glands and secondary sex or-
gans, 2841
intestines, pathology, 15181
origin, research on evolution of virus
theory, USSR study, 9655
paths of intracellular synthesis of viruses
of avian leucosis and sarcoma, USSR
study, 6534
trout hepatoma research conference pa-
pers, 11090
tumorigenic action of some human adeno-
viruses, USSR study, 6560
viruses, and cell structure, virological and
microscopic studies, USSR, 6562
see also Cancer.

Tuna fish:

deep-swimming, longline fishing in Mar-
quesas Islands and adjacent areas,
12549
longline fishing effort and catch rates in
northwestern Atlantic, 1957-65, inventory,
14063

Tungsten:

ages of plutonium-beryllium neutrons in
tungsten-water media, 1502
alloy, high strength—
at elevated temperatures, 5217
with improved ductility, 16969
brazing, for high temperature nuclear serv-
ice in hydrogen, 11506
cobalt alloys reaction with oxygen at
1,000° and 1,100° K, 14352
deposits, mineralogy, geochemistry and
genesis of, 1st all-Union conference,
1157
dislocation structures in slightly strained
tungsten and alloys, 14486
fiber-reinforced copper composites form
high strength electrical conductors, 2678
hot filaments, synthesis of higher order
hydrocarbons, 8504
hydrocarbon synthesis, use as catalyst,
12827
insulated susceptor cup for induction fur-
nace eliminate contamination, 5211
mineral industry survey, monthly, 3980
minerals yearbook chapter, 1416
properties, influence of neutron bombard-
ment, USSR study, 15369
reactor rocket engine, mapping as guide to
operation and control, 9876
resonance absorption integrals, determina-
tion by activation, 18012
rhenium alloys, lower-cost, 5208
rhenium-tungsten deposition by thermo-
chemical reduction of hexafluorides,
9767
stress-rupture and creep properties of
tungsten-fiber-reinforced copper compos-
ites, 17002

Tungsten—Continued

- tubing, thin-wall, extrusion of $\frac{1}{8}$ - and $\frac{1}{4}$ -inch-diameter, using floating mandrel technique, 5250
- tungsten-cobalt system for compositions to 85 atomic percent cobalt, 12816
- vanadium-base tungsten alloys, properties, 9780
- wrought, effect of ductile cladding on bend transition temperature, 17008

Tungsten hexachloride, purification, 14341

- Tungsten isotopes, resonance integrals, 9914
- Tunacata, Pacific specimens in National Museum, 9950

Tunisia:

- agricultural commodities, agreement, 1642, 5537
- background notes, 5523
- capsule facts for Armed Forces, 11979
- declaration on provisional accession to GATT, 2894
- labor conditions, 2519
- mineral industry, minerals yearbook chapter, 6688
- oceanographic research, Mediterranean Marine Sorting Center, agreement, 2931
- Sahli Sissah area, surface water and related climate features, 11189
- U.S. travelers, you can assist U.S. balance of payments, 11887

Tunnel diodes, see Diodes.

Tunnels:

- nonuniform radial loads applied to boundary of circular hole in infinite plate, 17914
- permafrost, Fairbanks, Alaska, geology, 17378
- South Vietnam, environmental characteristics, 15229
- Turbidity, East Siberian Sea, July-Sept. 1964, turbidimetric observations, 9988
- Turbine blades, see Blades.
- Turbine fans, tip, high gas temperature utilization, 4221
- Turbine fuel:
 - aviation, 1966, petroleum products survey, 9762
 - emulsified, feasibility of burning in gas turbine engines, 11998

Turbines:

- and components, Federal item identification guides for supply cataloging, supplements, 3285
- axial flow, off-design performance, analytical procedure and computer program, 8411
- cold-air investigation of turbine for high temperature engine application design and stator performance, 5236
- cold-air performance evaluation of fuel pump turbine for M-1 hydrogen-oxygen rocket engine, 6868
- computer program performs flow analysis through turbines, 1472
- gas, Mines Bureau coal-fired research project, test of new turbine blade design, 9772
- gas turbine engines—
 - accessory technology, advancement, 10291
 - component technology, high-temperature materials research, 10287
 - feasibility of burning emulsified fuel, 11998
 - hydraulic reactions, selecting, 2847
 - hydraulic turbine industry, price indexes for materials, quarterly, 3415
 - hydraulic turbine operations, index of hourly earnings, selected establishments, 3413
 - lift fan technology studies, 11402
 - radial-inflow, experimental performance evaluation over range of—
 - Reynolds number, 6871, 6881
 - specific speeds, 2716

Turbines—Continued

- turbomachinery, rotating components, computer program simplifies design, 15488
- variable geometry for small gas turbine engines, study, 11996
- Turboalternators:
 - Brayton-cycle, static parasitic speed controller, 17004
 - solar-Brayton system, parasitic-load speed control, analog-computer study, 5258
 - two-spool solar-Brayton system, valve-speed control, 5257
- Turbojet aircraft, see Airplanes.
- Turbojet engines, see Engines (aircraft).
- Turbomachines, see Turbines.
- Turbopumps, cold-air performance evaluation of fuel pump turbine for M-1 hydrogen-oxygen rocket engine, 6868

Turbulence:

- boundary layer—
 - characteristics of pointed slender bodies of revolution at supersonic speeds, 18026
 - investigation at Mach 6 with heat transfer at high Reynolds numbers, 8488
- clear air near thunderstorms, 6222
- drag measurements in stream with sinusoidally fluctuating velocity in longitudinal direction, 5749
- effect of turbulent troposphere on parameters of linear array antenna, USSR study, 5018
- free-flight heat-transfer data from axisymmetric bodies, correlation with compressible flat-plate relationships, 5272
- high-altitude, XB-70 airplane encounters, preliminary evaluation, 18038
- high levels, hot wire techniques in low density flows, study, 6841
- launch vehicle wind and turbulence response by nonstationary statistical methods, 15505
- National Committee for Clear Air Turbulence, report, 2226
- studies from aircraft and radar data, 10966
- weak homogeneous, effects of combined buoyancy and shear, 11542
- weak, in homogeneous plasma, 8906
- weak locally homogeneous, and heat transfer with uniform normal strain, 5254

Turbulent flow, see Flow.

Turkey:

- agricultural commodities, agreement, 17228
- atomic energy, cooperation for civil uses, agreement, 2898
- economy, basic data, 5952
- foreign trade regulations, 12136
- labor movement, 5016
- mineral industry, minerals yearbook chapter, 8369
- rifts within Turkish left, 14243
- Socialist Turkey, treatise, 5027
- trade in cotton textiles, agreement, 15786
- Turkeys:
 - farm production, etc., 7301, 13158
 - national improvement plan—
 - hatcheries, dealers, and independent flocks, participants, 7244
 - supplement, 10151
 - provisions, 14752
 - number raised, 1967, intentions, etc., 8762
 - prices and price spreads in 12 major cities, 11943
 - tested by official State agencies, monthly report, 3981
- Turkmen Soviet Socialist Republic, medical institutions, quality and number increase steadily, 14224
- Turkot, V. A., explosion puffed dehydrated potatoes, estimated cost of commercial production using shortened cycle, 8808

INDEX 1967

- Turman, James A., decisions from the field, what OE's decentralization means to schools and colleges, 16497
 Turnbow, James W.:
 aircraft passenger-seat-system response to impulsive loads, 17388
 crash survival design guide, 13309
 Turner, Charles A., relief, 277, 808
 Turner, Francis C.:
 nomination, hearing, 7826
 remarks, Mar. 16, 1967, 8663
 Turner, John, oil and gas lease, reinstate, 530, 12324
 Turner, John H., comparison of spinning performances of cottons with varying fiber properties, San Joaquin Valley, Calif., 15860
 Turney, George E., cooldown characteristics of regenerative nozzle used in cold-flow nuclear rocket test facility, 11500
 Turnips, production, 4111
 Turnover compartmentalization, statistical tracer theory for analysis of whole-system retention data, 12012
 Turpentine, *see* Naval stores.
 Turtle Creek, channel improvement, hydraulic model investigation, 7932
 Tuten, J. Russell, remarks, Sept. 14, 1967, 16090
 Tuthill, Samuel J., geomorphic effects of earthquake of Mar. 27, 1964, in Martin-Bering Rivers area, Alaska, 2370
 Tuttle, D. E. L., Navy management review, 3614
 Twinner, Sidney B., commercial potentials of semipermeable membranes, report, 6737
 Tuzigoot National Monument, general information, 17054
 TV, *see* Television.
 TVA, *see* Tennessee Valley Authority.
 Twesten, Luther C., role of education in alleviating rural poverty, 10917
 Twin Creek, limestone (Jurassic) in western interior of United States, 8168
 Twin helix system produces fast scan in infrared detector, 6800
 Two-phase flow through abrupt expansions and contractions, 7431
 Two years of progress, veterans affairs, 1965-66, 89th Congress, 1660
 Tygarts Creek:
 engineer report—
 departmental edition, 2210
 document edition, 2008
 Tyndale, Harry J., aerospace safety, 2993
 Tynes, William O., comparison of properties of mass concrete containing 3- and 6-in. maximum size, crushed limestone coarse aggregate, 4745
 Typesetting, automatic typographic-quality techniques, state-of-the-art review, 9942
 Typewriters:
 current industrial reports, 3169, 10359
 electric, furnished to Members of House of Representatives, increase number—
 law, 17561
 report, 14969
 industry, 1958-60, analysis and trends, 13355
 see also Ribbons for typewriters.
 Typical plans for retaining walls, 18194
 Typists:
 career opportunities await you, Army Department, 8896
 clerk typists, opportunities with FDA, 8046
 examination announcement—
 amendment, 14855
 supplement, 7549
 opportunities in State Department, 11831
 Typological approaches and delinquency, control, status report, 17166
 Tyrrell, Philip H., systems for measuring and reporting resources and activities of colleges and universities, 17058

U

- U.S.D.A., *see* Agriculture Department.
 U.S. fighting man's code, 13286
 U.S. foreign trade statistics, classifications and cross-classifications, 17440
 U.S. Government research and development reports, 3984
 U.S.I.A., *see* United States Information Agency.
 U.S. National Commission for UNESCO newsletter, 3986
 U.S.S.R., *see* Union of Soviet Socialist Republics.
 Ubieto, Victor M., relief, 533
 Udall, Stewart L.:
 remarks—
 Jan. 31, 1967, 6439
 Aug. 19, 1967, 15324
 Udell, Gilman G.:
 agricultural trade development and assistance act of 1954 and amendments, 4463
 antitrust laws with amendments, 1978
 atomic energy, act of 1946 and amendments, 1979
 civil service classification and salary laws, 1980
 crime, kidnapping and prison laws, 1982
 Federal farm loan act with amendments, and Farm mortgage and Farm credit acts compilation, 1983
 Federal Power Commission laws and hydroelectric power development laws, 1984
 Federal reserve act of 1913, with amendments and laws relating to banking, 1985
 law relating to—
 agriculture, 1986
 civil service retirement, 1981
 espionage, sabotage, etc., 1987
 Federal aid in construction of roads, 1988
 forestry, game conservation, flood control and related subjects, 1989
 interstate commerce and transportation, 1990
 pension laws, 1991
 railroad retirement and unemployment insurance act, as amended, 1992
 selective service act, as amended, 1993
 soldiers' and sailors' civil relief act of 1940 and amendments, 1994
 veterans laws, supplement, 1995
 Uganda:
 labor conditions, 1390
 mineral industry, minerals yearbook chapter, 8355
 UH-1, *see* Helicopters.
 UHF, *see* Ultrahigh frequency.
 Uhr, Carl G., Sweden's social security system, 1608
 Uhrig, Robert E., neutron noise, waves, and pulse propagation, 12003
 Uinta Basin, Southeastern, Utah and Colo., geology and fuel resources, 12610
 Uinta Mountains, High Uintas primitive area, mineral resources, 12598
 Ukrainian literature, Ukrainian Soviet literature on eve of great 50th anniversary, 4945
 Ukrainian Soviet Socialist Republic:
 Academy of Sciences, organization of comprehensive research, 15399
 dissertations on mechanics defended at institutes, 1302
 general progress under Soviet power, review by Communist Party central committee, 6576
 pride, a tale of mountain life in Ukraine, 16781
 scientific laboratories, institutes, and botanical garden, research gains noted, 14235
 Ulbricht sphere, modified, special purpose reflectometer uses, 9863

Ulrich, H. P., soil survey of Parke County, Ind., 13127

Ultrahigh frequency:
mechanical device accurately measures RF phase differences in VHF or UHF ranges, 6848

UHF wave propagation in troposphere, 6508

Ultrasonic water column probe speeds up testing of welds, 5225

Ultrasonic waves, *see* Sound.

Ultrasonics, *see* Sound.

Ultraviolet rays:
detecting system, electron-sensitive solid state matrix, research and development, 16897

irradiated and weathered softwood surfaces and clear coatings, microscopic observations, 14123

spectrometric techniques and spectrastucture correlations, 6631

ultraviolet radiation, effect and use, USSR study, 12663

vacuum ultraviolet below 500Å, continuously operating source, 5224

Ultraviolet spectrum, *see* Spectra.

Ulvedal, Frode, excretion of steroids and catecholamines during exposure to oxygen-helium atmosphere, 7366

Umatilla, Oreg.:
relief—
law, 485
report, 838

Umatilla National Forest, multiple use highlights, 15291

Unbilled systems, lock-disconnect mechanism gives positive release to joined bodies, 11460

Umiat, Alaska:
bentonite, unusual montmorillonite, analysis, 13291

geology of Umiat-Maybe Creek region, 8159

UN, *see* United Nations.

Un-American activities:
assistance to enemies of U.S. in undeclared war, make punishable, reports, 2017, 2019, 10618, 12263

curb terrorist organizations, report, 16250

subversive activities control act of 1950, amend to accord with court decisions, report, 15106

Un-American Activities Committee, House:
annual report, 13660

committee print, 7757

expenditures, authorizing, report, 9105

hearings, 10660

reports, 699, 2017, 10618, 16250, 16290

Undercoat prevents blistering of silver plating at elevated temperatures, 11444

Underdeveloped areas:
agricultural assistance, picture story, 17332

economic development (periodical), 3226

project activity supplement, 6159

trade and investment in developing countries, report, 9026

Underemployment, *see* Unemployed.

Undergraduates, *see* Students.

Underground mining, *see* Mines and mining.

Underground power transmission, 12513

Underground structures, construction, USSR study, 9662

Undertakers and undertaking, funeral directors' handbook on death and fetal death registration, 17142

Underwater cable design, 15387

Underwater research, *see* Hydrooptics—Oceanography.

Underwater ships of science, 8267

Underwater sound, *see* Sound.

Underwater sports in USSR, 6532

Underwear, knit, current industrial reports, 3170

Unemployed:
area redevelopment act, training programs, impact on public assistant case-loads, 3406

area trends in employment and unemployment, 3039

Federal unemployment taxes, benefits from quarterly collection, Labor and Treasury Depts., GAO review, 8135

how government measures unemployment, 15437

labor force, employment, and unemployment, 15452

labor surplus area specialists, Defense Dept., list, 7866

manpower development and training act—amendments of 1966, law, 496

learn and train for job under MDTA, 13971

mid-decade census, take in 1975, etc., hearings, 10666

structural unemployment in United States, 7872

training and technology in Tennessee, new skills for underemployed, 16792

underemployment concept, way to measure need for economic development in Appalachia, 10922

unemployed-parent segment of aid to families with dependent children, 3988

work experience and training program, 12482

Unemployment, *see* Unemployed.

Unemployment compensation, *see* Unemployment insurance.

Unemployment insurance:
benefit series service, 3055

claims, 3989

District of Columbia unemployment compensation act, amend to exempt public international organizations, report, 16293

employment security, slides and films, 12472

Federal employees, financial protection, 1925

program—
extend benefits, etc., summary of Senate amendments to bill, 2115

research studies, 1951-66, bibliography, 6200

publications, price list, 17135

railroad act, text as amended, 1992, 15719

State laws—
comparison, 6199, 17727

employment and wages of workers covered, 3233

evaluation of coverage and benefit provisions, summary tables, 12471

significant provisions, 13973

State salary ranges of positions in employment security, etc., 4898, 11194

unemployment insurance review (periodical), 3990

unemployment insurance statistics (periodical), 3991

UNESCO, *see* United Nations Educational, Scientific, and Cultural Organization.

UNICEF Day, *see* National UNICEF Day.

Unified action Armed Forces (UNAAF), 16730

Uniform reflective films deposited on large surfaces, 5203

Uniformed services, *see* Armed Forces—Pay, allowances, etc.

Uniforms:
furnishing for deceased members of National Guard and Ready Reserve, report, 16229

Marine Corps regulations, 8333

Navy regulations—
change, 8583

effective pages, 17081

postal service, permit use in theatrical, television or motion picture productions, report, 14975

INDEX 1967

Uniforms—Continued

- United States Navy, 1776-1898, posters, 7008
- see also Clothing.
- Union of Medical Science Societies, Rumania, conference results reported, 14274
- Union of Soviet Socialist Republics:
 - Academy of Medical Sciences—
 - nominations, 5022
 - pediatrics session, report, 2461
 - vestnik (periodical), 4036
 - Academy of Sciences—
 - All-Union Entomological Society activities, report, 2471
 - Departments of Biochemistry, Biophysics, and Chemistry of Physiologically Active Compounds, annual convention, 2745
 - elections of biomedical scientists, 1331
 - new members, 2440
 - reports, 6579
 - vestnik (periodical), 4037
 - accelerators, plans, 1342
 - agricultural institutions, research work, 6572
 - agricultural situation—
 - mid-year review, 16491
 - review and outlook, 9394
 - agricultural workers, protective masks available, description, 2457
 - agriculture, translations, 3968
 - air defense troops, 6569
 - air transport services, agreement, 5552
 - All-Union Academy of Agricultural Sciences imeni V. I. Lenin, patent practices and other measures, discussion, 1207
 - all-Union conferences and congresses—
 - biochemistry of nervous system, 1336
 - bionics, 1220
 - mineralogy, geochemistry, and genesis of tungsten deposits, 1157
 - scientific-technical, for automation of chemical production, 2454
 - analog and digital computer requirements, 1236
 - Antarctic research—
 - fishery research on Antarctic krill, 15345
 - Soviet Committee for Antarctic Research, reports on recent work, 12728
 - ten years, 12755
 - Arab nationalism, Soviet view, 9629
 - arms control and disarmament, press materials, translations, 3888
 - automation and cybernetics research, 6499
 - background notes, 17216
 - biochemistry and Minsk-2 computer, Bulgarian study, 4947
 - biological productivity of terrestrial plant communities, problems, conference, 4968
 - blackmail charges made by USSR in Middle East oil crisis, 15397
 - brain composition and function studied, by Soviet scientists, errata, 9610
 - Buddhism, Soviet view, 2429
 - Byurakanskaya Astrophysical Observatory, 1198
 - candidates for State prizes, 11282
 - chemical nature of organic matter in water of major rivers, 9614
 - communications, herald (periodical), 3397
 - communications, translations, 3969
 - Communist Party—
 - 23rd Congress, on struggle against imperialist ideology, 9654
 - U.S.A., Soviet pawn, 6114
 - computer centers and automatic accounting and control systems, 1340
 - computer technology, problems in assimilating, 2449
 - construction industry—
 - plans improvement in production and technology, 8239
 - trends, 4984
 - consular convention—
 - hearings, 6103
 - report, 6067

- Union of Soviet Socialist Republics—Con.
 - consumer goods and domestic trade, translations, 3970
 - cotton production, etc., addendum, 13245
 - cultural relations, exchanges, agreement, 7182
 - current 5-year plan, hydrobiology and ichthyology goals defined, 6522
 - cybernetics—
 - current applications, 12730
 - technical, problems of control and information problems of science, 2427
 - Czechoslovakia-U.S.S.R. boundary, study, 17225
 - desalination, agreement, 11841
 - development of live vaccines, survey, 9618
 - earthquakes, 1255
 - economic reforms in light industry, results, 5009
 - economy and industry—
 - current developments, 4013
 - general information, 4014
 - economy, application of—
 - computer technology, 1310
 - macro-economic production functions, 2469
 - economy, contemporary stage of development, and bourgeois criticisms, 9639
 - education, translations, 3966
 - educational institutions—
 - correspondence and evening higher educational institutions, prospects, 1164
 - productivity discussed, 1292
 - engineering patents, 9623, 9643
 - ethnography translations, 8261
 - experiment in insecticide effectiveness, 4978
 - experimental power plant with magneto-hydrodynamic generator, 15428
 - faithfulness to international obligations, 14267
 - farm production, effects of increased incentives, 2468
 - Flat-Soviet auto plant and Communist economic reforms—
 - study, print additional copies, report, 10594
 - subcommittee report, 12291
 - Finland-USSR boundary, study, 8718
 - fisheries, northeastern Pacific Ocean off U.S. coast, agreement, 11858
 - foreign policy, phases, 1279
 - gas industry, rapid development, 2451
 - Gorky Medical Institute, failings noted, 4936
 - graduate schools and medical training, improvements sought, 15407
 - health officials, 1247
 - Hematological Service, and immediate tasks confronting it, 6584
 - hospital services, report of U.S. delegation on hospital systems planning, 2826
 - Hungary-U.S.S.R. boundary, study, 17224
 - hydrobiology, survey of fifty years of work, 14236
 - hydrometeorological service news, 1175
 - industrial development—
 - automotive and tractor industry, 4015
 - chemical industry and machinery, 4016
 - construction, construction machinery, and building materials, 4017
 - electric power, power machinery, and electrical equipment, 4018
 - electronics and precision equipment, 4019
 - metallurgy and minerals, 4020
 - metalworking equipment, 4021
 - precision equipment, 4022
 - inland seas, what will happen to them, 8244
 - Institute of Oceanology, 20th anniversary, 9622
 - intellectual ferment, aspects, 4571
 - print additional copies, report, 2098
 - international economic relations, translations, 4024

Union of Soviet Socialist Republics—Con.
 joint Soviet-Polish scientific and technical
 meeting, 9658
 journalist describes visit to Communist
 China, 6583
 king crab, fisheries, agreement, 11857
 labor force and civilian employment, 1950-
 75 estimates and projections, 12090
 labor, studies, 6530
 labor, translations, 3971
 law and social regulation, translations,
 3967
 man-machine systems, problem, sympo-
 sium, report, 16753
 medical apparatus, new, 17877
 medical educational extension service pro-
 gram, review, 2433
 medical history reviewed, 14227
 medical industry (periodical), transla-
 tions, 4023
 medical instruments, description, 12722
 medical research praised and criticized,
 6567
 medical service, measures to improve, 6538
 medicine and biological sciences, better
 coordination urged, 6500
 medicine and biology, translations, 14271
 medicine, prospects and achievements,
 15360
 military schools adopt programmed teach-
 ing methods, 16756
 military translations, 3887
 mineral industry, minerals yearbook chap-
 ter, 15470
 Mosenergo high-voltage overhead electric
 power network, development study, 6550
 motion picture, July rain, reviewed, 16771
 Muslim teachings and education reviewed
 in press, 1252
 NATO, Soviet view (speech), 9317
 northern, sailing directions, change, 14574,
 15626
 nuclear weapons development, digest, 7746
 oceanographic ship conducts marine re-
 search in Pacific, 14240
 organic chemistry studies, 2444
 organization of interdisciplinary cybernetic
 studies, 15349
 pharmaceutical development, 15391
 poor safety measures and work methods
 at mines, 2478
 power plants in India, studies, 6525
 programmed instruction, state, 11248
 propaganda, techniques, 12322
 print as Senate document, report, 12372
 public health—
 economics, discussion by medical men
 and economists, 2462
 greater economy urged, 6570
 problems in next 5-year plan, 4966
 service, defects cited, 1263
 publications on applied problems in tech-
 nical cybernetics described, 14262
 rebellion in Russia's Europe, fact and fic-
 tion, print additional copies, report,
 12373
 report on oil-producing Arab nations,
 11254
 research—
 application of electronics in biology and
 medicine, 4970
 applied chemistry, 4979
 bionics, reports, 1259
 brain composition and function studied
 by Soviet scientists, 8271
 cancer, recent work, 1334
 ion-exchange technology, 8254
 need for activities cited, 2428
 nutrition, 2459, 6511
 personnel training in bionics, 16773
 petroleum industry, 1187
 scientific bases of strength and plastic-
 ity of materials, 2453
 selection of optimal working communi-
 cation frequencies, 6518
 virology, 4993

Union of Soviet Socialist Republics—Con.
 Russian drug index, 8534A
 satellite tracking equipment, description,
 9611
 science—
 basic trends discussed by Academician
 Ya. V. Peyve, 8253
 expands, 12751
 promoting development, 15374
 science and technology achievements,
 14248
 scientific abstracts, 4025-31
 scientific and technical information (peri-
 odical), 3852
 scientific and technical information serv-
 ice, organization, 2430
 scientific education, measures outlined for
 improving, 14245
 scientific establishments, activities, 2479
 scientific organizations—
 activities, 15379
 news, 2436, 6519
 recent progress described, 1267
 scientists—
 and scientific organizations, news, 9638
 benefits and improvements, 4982
 honored, 1190
 research and activities reviewed, 14264
 satellite meteorology, papers, 4986
 scuba diving, 15420
 selected functional bibliography, 15763
 Sino-Soviet conflict, implications, report
 and hearings, print additional copies,
 report, 2029
 soil conductivity, results of measurements,
 14229
 Soviet-Arab contradictions in relations
 with Israel, 14241
 Soviet-Polish symposium on development
 of science, 15411
 space—
 activities, brief recapitulation, 1305
 programs, 1962-65, goals and purposes,
 etc., 4628
 space biology and medicine, conference,
 reports, 1228
 standardization, recent developments, 8240
 state budget under conditions of imple-
 mentations of economic reform, 4944
 steel casting and foundry work, 1224
 technological advancement and improve-
 ment, 1158
 10-year school, final examinations, 1002
 test airfield of Soviet air forces, 16738
 transportation, translations, 3972
 U.S.A. vs. U.S.S.R., changing strategic
 military balance, 12258
 Ukraine, general progress under Soviet
 power, review by Ukrainian Communist
 Party central committee, 6576
 underwater sports, 6552
 virology and cancer studies, 9616
 virus studies, 6516
 Voronezh State University, living and
 study conditions of Chinese post-
 graduate students, 4954
 weather modification, 1964-66, bibliog-
 raphy, 17903
 Union provost marshals' papers relating to
 civilians, pamphlet accompanying micro-
 copy, 18061
 Union wages, *see* Wages.
 Unions, *see* Fishermen's and fish shore
 workers' unions—Labor unions.
 Unit heaters, current industrial reports,
 3170, 12070
 United Arab Republic (Egypt):
 background notes, 7142
 capsule facts for Armed Forces, 10249
 declaration on provisional accession to
 GATT, 11863
 economy, basic data, 12132
 education, Commission for Education and
 Cultural Exchange and financing pro-
 grams, agreement, 11870

INDEX 1967

United Arab Republic (Egypt)—Continued
 food products import market, 1947
 labor conditions, 1391
 Soviet-Arab contradictions in their relations with Israel, 14241
 U.S. travelers, you can assist U.S. balance of payments, 11887
 war or peace in Middle East, study mission report, 10837
 United Kingdom, *see* Great Britain.
 United Kingdom of Great Britain and Northern Ireland, *see* Great Britain.
 United Nations:
 action agency for peace and progress, 14679
 charter amendment—
 message from the President, 4574
 report, 9189
 conference, single convention on narcotic drugs, 1961—
 message from the President, 7771
 report, 9190
 development program, and private enterprise, how to bid on special fund projects, 4262
 foreign relations of U.S., diplomatic papers, general—
 departmental edition, 18230
 document edition, 17565
 headquarters, agreement, 8733
 peacekeeping dilemma, 10835
 Southern Rhodesia and United Nations, U.S. position, 8720
 United Nations at 21, report, 7810
 United States participation, report—
 departmental edition, 8719
 document edition, 7608
 United Nations Educational, Scientific, and Cultural Organization:
 amendment to constitution, 17243
 special fund projects, 14690
 U.S. National Commission, newsletter, 3986
 United States and UNESCO, challenges for the future, 10105
 United States:
 Note.—For all subjects pertaining to the United States, except its government, general history, and description, *see* such subjects.
 America Illustrated (periodical)—
 Polish language edition, 3026
 Russian language edition, 3027
 becoming a citizen series—
 our American way of life, 11211
 our Government, 12630
 our United States, 12629
 commitments to foreign powers, hearings, 17652
 conflicts between U.S. capabilities and foreign commitments, hearing, 6102
 Constitution and Government, Federal textbook on citizenship, 12631-632
 discovery and rediscovery for economic development (address), 7561
 facts, from recent Census Bureau surveys, 7491
 foreign policy commitments, should be substantially reduced, national high school debate topic, 2002
 geographic names, decisions list, 1105
 growth, 1640-1851, exhibition, History and Technology Museum, Smithsonian Institution, 18203
 pocket data book, USA 1967—
 departmental edition, 5890
 document edition, 5986
 state of the Union message from President Johnson, 12195
 statistical abstract, 1967—
 departmental edition, 14834
 document edition, 14923
 travel a new world, *see* U.S.A., map, 13170
 U.S.A. vs. U.S.S.R., changing strategic military balance, 12288

United States and the world, introduction to our foreign relations, 5553
 United States Arms Control and Disarmament Agency, biographic register, 14670
 United States Army Service Center for Armed Forces, USASCAF pamphlet, 4229
 United States coast pilots, *see* Coast pilots.
 United States code, *see* Codes of law.
 abolish office—
 hearings, 12416
 report, 13810
 system, proposals to reform, hearings, 12416
 United States Committee on Human Rights, establish, report, 12386
 United States Corrections Service, establish, hearings, 12306
 United States District Court for D.C.:
 liens established by judgment or decree, recordation by recorder of deeds, report, 12385
 transfer authority rel. to marriage license issuance—
 law, 13533
 report, 13641
 United States Educational Foundation in Australia, agreement, 15770
 United States Educational Foundation in Italy, agreement, 11842
 United States Educational Foundation in Netherlands, agreement, 11861
 United States Envelope Company, inspection tour, report, 4554
 United States Information Agency:
 appropriations, 1967, law, 501
 appropriations, 1968—
 hearings, 10632, 16390
 reports, 10618, 16372
 biographic register, 14670
 domestic dissemination of materials, prohibit, etc., report, 10767
 field staff, Foreign Service list, 3349
 Foreign Service personnel system, improve, hearing, 17653
 housing at Brewerville, Liberia, potential savings through constructing rather than leasing, GAO report, 6379
 magazine reprint MR series, 5532
 report to Congress, semiannual, 7216, 17274
 retirees, prospective, general information for, 8721
 United States-Israel Educational Foundation, agreement, 11874
 United States-Japan Committee on Scientific Cooperation, 1st 5 years, 1961-66, major activities, etc., 13138
 United States magistrates, establish office, report, 13810
 United States Mission to United Nations, biographic register, 14670
 United States-Puerto Rico Commission on Status of Puerto Rico:
 background studies, 2960
 hearings, 763, 2068, 10690
 report, 2959
 United States reports, *see* Supreme Court.
 United States Travel Service:
 annual reports, 5578, 17277
 press releases, 3766
 10th program report, 5579
 United States-United Kingdom Educational Commission, agreement, 13149
 Universal military training and service act, *see* Military service.
 Universities, *see* Colleges and universities.
 University of Alaska:
 transfer Alaska Agricultural Experiment Station to—
 law, 366
 report, 660
 University of California:
 carillon, duty-free entry, 7649, 14887, 16355

University of California—Continued
marine biological research laboratory, use
of land donated, hearing, 746

University of Maine:
land, permit disposal—
hearings, 16303
report, 16276

University of Tennessee, Agricultural Re-
search Laboratory, research, progress re-
port, 7425

Univibrator circuits, *see* Circuits.

Unloading and lading:
airdrop of supplies and equipment, rigging
typical supply loads, 8887
fresh fruit and vegetable unloads—
eastern cities, 7830
midwestern cities, 7832
southern cities, 7833
totals for 41 cities, 7834
western cities, 7831
lettuce, load pattern effect on transit tem-
peratures and crushing in transcon-
tinental shipments, 11916
steel products, recommendations of trade,
amdt., 6920
watermelons, heavier loading in rail cars
and piggyback trailers, damage and cost
reduction study, 10154

Unloading, *see* Unloading and lading.

Unparalleled opportunity for employment of
handicapped (address), 8616A

Uota, M., quality and display life of carnation
blooms after storage in controlled
atmospheres, 15863

Upchurch, Robert E., subject headings used
by USAEC Division of Technical Informa-
tion, 128

Upconverters, parametric, increases flexibi-
lity of maser, 9859

Upland cotton, *see* Cotton.

Upper Cretaceous period, *see* Cretaceous
period.

Upper Cumberland Coal Reserve District,
land disturbances from strip-mining, 8077

Upper Great Lakes Regional Commission:
alternate cochairman, nomination of Har-
old C. Jordahl, Jr., hearing, 16433
new approach to economic development,
17281

Upper Klamath National Wildlife Refuge,
birds, list, 15262

Upper Mariboro, Md., motor carrier accident,
16873

Upper Ordovician period, *see* Ordovician
period.

Upper Pennsylvanian period, *see* Pennsyl-
vanian period.

Upper Silurian period, *see* Silurian period.

Upper Volta:
background notes, 10095
capsule facts for Armed Forces, 15910
labor conditions, 2520

Upshur County, W. Va., coal, preparation
characteristics, 14358

Upward bound, program to help youth from
low income families achieve college educa-
tion, etc., 9585

Ural electronic computers, *see* Electronic
computers.

Uranium:
and thorium-bearing minerals, glossary,
17819
carbide cathodes of solid solutions, evap-
oration rates, 6532
concentration and isotopic composition in
reactor fuel element solutions, 13333
deposits—
epigenetic, in sandstone in United
States, geology, 8167
Laguna district, N. Mex., 8165
Moab, Monticello, White Canyon, and
Monument Valley Districts, Utah and
Arizona, 6391
Ralston Buttes district, Jefferson
County, Colo., 15308

Uranium—Continued
discovery of uranium-233 (remarks), 4240
enrichment services criteria and related
matters, hearings, 1976
geology and uranium deposits of southern
Black Hills (series), 12597, 14168
mining, radiation hazards, guidance for
control, 17761
phase relations in uranium monocarbide
region of system uranium-carbon-oxygen,
12821
recovery by fluid-bed fluoride volatility
process from spent alloy fuels, 9793
western project, mechanical samplers in
use at Grand Junction, Colo., design and
descriptions, 15963

Uranium carbide, phase relations in mono-
carbide region of system uranium-carbon-
oxygen, 12821

Uranium dioxide, UO_2 fuel systems for wa-
ter applications, development and testing,
8902

Uranium hexafluoride, handling procedures
and container criteria, 1796, 13340

Uranium isotopes:
quantitatively determined by modified
method of atomic absorption spectro-
photometry, 14368

U-235, reactor fuel, fission product nu-
clides, identification for dose calcula-
tions following accident, 13349

Uranium oxides, thermal decomposition in
vacuum, USSR study, 16743

Uranyl phthalocyanines show promise in
treatment of brain tumors, 12842

Urban America, goals and problems, 14921

Urban areas, *see* Cities and towns.

Urban planners, *see* City planners.

Urban planning, *see* Redevelopment (city
planning, etc.).

Urban policy, *see* Redevelopment (city
planning, etc.).

Urban Problems, National Commission, *see*
National Commission on Urban Problems.

Urban public transportation, selected refer-
ences, 2385

Urban renewal, *see* Redevelopment (city
planning, etc.).

Urban renewal manual, 4009

Urbanization and its impact on mineral ag-
gregate industry in Denver, Colo., area,
6637

Urbanization and mineral aggregate indus-
try, Tucson, Ariz. area, 5105

Urethanes, polyurethane adhesive, use of
nonwoven glass fiber mat to reinforce,
11450

Urga-Ferraro, Francesco, relief, 10541,
13511, 13757

Urga-Ferraro, Giovanni, relief, 10541,
13511, 13757

Uric acid:
levels in parotid fluid, effect of—
rate of gland function, 11959
uricosuric drug administration, 11960

Uricosuric drug, *see* Probenecid.

Urie, Dean H., waterline erosion control es-
sential to streambank rehabilitation,
14099

Urinals, trim, standard of trade, 5287

Urinanalysis, *see* Urine.

Urine:
creatinine excretion as index of fat-free
mass composition in rats, 7415
excretion of steroids and catecholamines
during exposure to oxygen-helium at-
mosphere, 7366
immersion diuresis, 15896
renal excretion of solutes in rabbits, ef-
fect of —7G_x acceleration, 14776

urinalysis—
automated technique determines con-
centration of creatine, etc., by colorim-
etry, 14437
laboratory procedures, 10221

INDEX 1967

Ursic, S. J., late planting improves loblolly survival, 8119

Uruguay: background notes, 11821

livestock and meat industry, 11098

mineral industry, minerals yearbook chapter, 11361

radio communications between amateur stations on behalf of 3d parties, agreement, 5545

USAEC, *see* Atomic Energy Commission.

USAF instructors journal, 4011

USAF Scientific Advisory Board, *see* Scientific Advisory Board, USAF

USAFI, *see* Armed Forces Institute.

USAPRO, *see* Army Personnel Research Office.

USASCAF pamphlet, 4229

USATEA, *see* Army Transportation Engineering Agency.

USDA, *see* Agriculture Department.

Usdin, Earl, psychotropic drugs and related compounds, tabulation, 11752

Use of color for safety, safety in industry, instructor outline, 8297

Use tax, District of Columbia, exempt House of Representatives majority and minority rooms, printing operations, etc., report, 9087

User's guide to technical library services, 10265

USIA, *see* United States Information Agency.

USS Cascade, *see* Cascade (USS).

USS Shenandoah, *see* Shenandoah (USS).

USSR, *see* Union of Soviet Socialist Republics.

USTS, *see* United States Travel Service.

Utah: census of agriculture, 1964, State and county statistics, 13410

census of manufactures, 1963, area statistics, 1852

census of mineral industries, 1963, area statistics, 5343

climatological data, 3096

coalfields, low-temperature carbonization product yields, estimation, 14345

coking properties of selected coals and blends, 11377

convey relicted lands lying below meander line of Great Salt Lake, hearing, 4643

county business patterns, 12063

early Indian tribes of Lower Plateau, 6437

electric rate book, 11025

Green River formation, geology and fuel resources, 12610

Iron Springs district, geologic interpretation of aeromagnetic survey, 11173

mineral industry, minerals yearbook chapter, 5121

Moab-Needles area, regional geophysical investigations, 2368

northern, soil moisture depletion by gambel oak, 4831

phosphate industry and its resources, evaluation, 11370

postal map, 5400

precipitation data, hourly, 3401

radioactivity, airborne, 1952-55, maps, 1802

southwestern— coal resources for steam-electric power-generation plants, 8341

Upper Triassic and Triassic (?) formations, correlation, 6393

Zion Park region, Carnel formation review, 11168

water supply outlook and snow surveys, 4050

Utah Territory, service records, microcopy, pamphlet to accompany Union Army volunteers, 18073

Ute Indians: Confederated Bands of Ute Indian Tribes, judgment funds, distribution— law, 13540

report, 9114

southern Ute Tribe of Southern Ute Reservation in Colorado, funds, disposition, report, 7778

Ute Mountain Indian Reservation, geology and availability of ground water, 6409

Ute Mountain Tribe of Ute Mountain Reservation, rights and interests in certain lands held in trust, determine, report, 13832

Utensils, *see* Implements, utensils, etc.

Uterus: cancer, 14628

precancer and cancer of cervix uteri, differential cytological diagnosis using fluorescence and phase-contrast microscopy, USSR study, 12700

Utilities: Job Corps men's and women's centers, facilities maintenance and utilities operations handbook, 7876

Military Academy, provide without charge to certain civilian instructors, etc.— law, 430

report, 933

water and wastewater, capital expenditures, 1964 distribution, 4260

see also Public utilities.

Utility companies, *see* Electric utilities— Public utilities.

Uwarrrie National Forest, deer browse resources, 8124

Uzbek Soviet Socialist Republic: Academy of Science, work reviewed, 8272

contributions of Uzbek scientists to Republic's development outlined, 12671

V

V.A., *see* Veterans Administration.

VA, *see* Veterans Administration.

VA fact sheets IS (series), 5586

Vacation house, building plan, 8837

Vacation pay, *see* Wages.

Vacations: national-forest vacations, 11107

vacation home study, 1966, northern New England, 18116

Vaccination, reactions to bacterial antigens after irradiation, USSR study, 9665

Vaccine: controls over use in hog cholera eradication program, GAO review, 9549

live, development in Soviet Union, survey, 9018

Vacuum: applications to cryogenic temperatures, feed-thru flange useful, 6778

cardiovascular responses in anesthetized dogs during repeated decompressions, 78

chamber evacuation, quartz crystals detect gas contaminants, 14416

chamber remotely sealed by eutectic metal, 11390

changer, clean with 1-watt refrigerator, 12930

combination double door high-vacuum valve provides access to vacuum chamber, 9825G

cryogenic cooling reduces high voltage arcing between electrodes operating in vacuum, 5146

electrothermy, processes and apparatus, USSR study, 12720

environment, screw-seal performance, 6885

flash vapor deposition in vacuum, evaporant feed device facilitates process, 16955

free jet impingement normal to curved surface, 9897

high and super-high vacuum physics and technology, scientific and technical conference, USSR, 11250

Vacuum—Continued

- high temperature, fatigue testing of type 316 stainless steel and Inconel X with resonance-type machine, 11676
- improved rolling element bearing provide low torque and small temperature rise in ultrahigh vacuum environment, 6835
- machine tests slow-speed sliding friction in high vacuum, 17989
- measurement, bibliography and index, supplement, 12984
- outgassing rates of solid rocket fuels, 5262
- rapid decompression and exposure of fresh foods, 1735
- rhenium, single-crystal and polycrystalline, friction characteristics in vacuum, 9912
- solar X-ray spectrum reproduced in vacuum, 12895
- switchgear, survey, 8440
- thermal decomposition of uranium oxides in USSR study, 16743
- ultraviolet—
 - below 500 Å, continuously operating source, 5224
 - ion chambers simplify absolute intensity measurements in, 1447
- Vacuum cleaners, industrial plant equipment handbook, 4674
- Vacuum gages, volume-ratio calibration system used, 6802
- see also Ionization gages.
- Vacuum seals, rubber and alumina gaskets retain inside high temperature EMF cell, 5141
- Vacuum systems, small volume, ultrahigh, for ionization gage studies, 18037
- Val, Antonio S., relief, 16200
- Valbyteuthidae, see Squids.
- Valdes, Cruz, Oscar, relief, 534
- Valdés-Fauli, G. F., relief, 13765, 16208
- Valdes-Rodriguez, Julio, relief, 9200, 12145, 12213
- Valentine National Wildlife Refuge, native sandhills grasses, description, etc., 16621
- Valera, Jaime E. Condom, see Condom Valera, Jaime E.
- Vallbona, C., effect of bedrest on various parameters of physiological function, effect of bedrest on circulatory response to Valsalva maneuver, 2595
- Vallby, James L., mineral industry of Georgia, 2552
- Vallerie, Leroy L., peripheral vision displays, 12865
- Valuation, practices of local cooperative grain elevators, 15235
- Value engineering, reduce costs and improve equipment, 4682
- Valves:
 - check valve installation in pilot operated relief valve prevents reverse pressurization, 6815
 - closure, actuator device schedules rate, 6840
 - combination double door high-vacuum valve provides access to vacuum chamber, 9825G
 - effectively control amount of contaminant in flow stream, 6838
 - Federal item identification guides for supply cataloging, supplements, 3288
 - fuel and oxidizer valve assembly employs single solenoid actuator, 9825B
 - in-tank shutoff, provided with maximum blast protection, 2645
 - labyrinth-type valve seat increases valve life by decreasing fluid velocity, 1444
 - leakage through closed valves, correlations for predicting, 17038
 - miniature, accurately controls small volume fluid flow, 5142
 - modulating for programmed temperature, 2
 - relief valve poppet stroke, use of aspirator to increase, 12890

Valves—Continued

- remotely operated high pressure valve protects test personnel, 15551
- solenoid design has one moving part, 14425
- solenoid, monitoring circuit accurately measures movement of, 2676
- solenoid-valve actuations, control with variable-pulse switching circuit, 8456
- spool, cycles at controlled frequency, 2635
- technology, advanced, NASA contributions to, 15518
- Teflon sheet permits valve and valve actuator to move as single unit in cryogenic pipe line, 6698
- temperature responsive valve withstands high impact loading, 14427
- two-spool solar-Brayton system turboalternator, valve-speed control, 5257
- vortex, for medium temperature solid propellants, 2651
- Vanadium:
 - ductile, electrolytic process for producing, 12825
 - electron-beam purification, 15480
 - mineral industry survey, monthly, 4032
 - scrap, molten-salt electrorefining, 17916
 - Ti-3Al-1Mo-1V simulated wing structure, fusion welded, fatigue behavior, 16905
 - vanadium-base tungsten and chromium alloys, properties, 9750
- Vanderbilt Mansion National Historic Site, general information, 2759
- Vandergrift, A. E., mechanism of mass transfer through liquid interface, 8215
- Vanderveen, John E., study of man in oxygen-helium atmosphere, nutritional evaluation of feeding bite-size foods, 83
- Van Deusen, B. D., statistical technique for dynamic analysis of vehicles traversing rough yielding and non-yielding surfaces, 8407
- Van Dolah, Robert W., sympathetic detonation, 5131
- Van Doren, Ron, missionaries in classroom, 6188
- Vanes, variable-geometry guide vanes, use to control rotor-inlet flow conditions, 5275
- Van Hooser, Dwane D., southern pulpwood production, 17809
- Van Sickle, Charles C.
 - East Texas' timber harvest, 2323
 - factors for converting Midsouth pulpwood from cords to cubic feet, 8096
 - forest industries in Appalachia counties of Tennessee, 16666
- Van Stee, Ethard W., effect of sodium acetate on TmPAH depressed by exposure to hydrazine, 4177
- Van Thiel, M., compendium of shock wave data, 5793
- Vapor-chamber fin studies, transport properties and boiling characteristics of wicks, 14379
- Vapor pressure:
 - metal halides, $\text{SnCl}_2\text{-ZnCl}_2$ binary system, 16864
 - new class of compounds have very low vapor pressures, 12838
 - pure liquid nitrogen, 6639
 - refractory materials with low thermal absorption cross sections, data extrapolated to 1000 atmospheres, 18015
 - vapor gap osmotic distillation process, 2394
- Vaporization:
 - potassium, high temperature, in forced convection at saturation temperatures of 1800° to 2100° F, 14391
 - propellant, frequency response characteristics, analysis, 5235
- Vaporizers, classification definitions, 18122
- Vapors:
 - interfacial behavior following termination of outflow in weightlessness, 8501

INDEX 1967

Vapors—Continued
 sodium potassium and cesium, expansion and flow characteristics, 2717
 water-vapor electrolysis cell with phosphoric acid electrolyte, 12858
 welding, bonding, and sealing of refractory metals by vapor deposition, 14332
see also Mercury vapor—Water vapor.

Vargo, Franklin J.:
 basic data on economy of Surinam, 16103
 foreign trade regulations—
 Bahamas, 7576
 Barbados, 9019
 Bermuda, 9017

Variable reluctance switch avoids contact corrosion and contact bounce, 11466

Variable stars, *see* Stars.

Variables (mathematics):
 computer optimization program finds values for independent variables that minimize dependent variable, 17958
 multiple correlation computer program determines relationships between several independent and dependent variables, 16961
 variable-structure automata, USSR study, 17861
 variable turbine geometry for small gas turbine engines, 11996

Variance and covariance of life table functions estimated from sample of deaths, 8657

Variation (biology):
 mutagenic activity of chemical compounds, and genetic effect when combined with ionizing radiation, USSR studies, 2438

Variational principle for stationary magneto-hydrodynamic equilibria, 12008

Variolose veins, cause, treatment, etc., 2815

Varnes, David J., general and engineering geology of United States Air Force Academy site, Colo., 11179

Varnish and varnishing:
 current industrial reports, 3169, 10357
 safety engineering in painting and varnishing shops, USSR book excerpts, 15363

Vascular plants, *see* Plants.

Vascular system, *see* Cardiovascular system.

Vasilopoulos, Ioannis A., relief, 344, 543

Vasquez, Carlos R. Flores, *see* Flores-Vasquez, Carlos R.

Vaughan, George G., operations bygrade, anatomy of shutdown, 13972

Vaughan, J. A., coal, Pennsylvania anthracite, 2535

Vaughan, W. W., simple mercury vapor detector for geochemical prospecting, 9568

Veal, in family meals, guide for consumers, 5630

Vector diffraction theory, 7935

Vector integral equations, *see* Equations.

Vectors (mathematics), *see* Mathematics.

Vegetable gardens, *see* Gardens.

Vegetable products, *see* Agricultural products.

Vegetables:
 bright jewels, guide, for program aides in home economics, 4133
 commercial processing, acreage marketing guides, 6127
 containers, standard acts of 1916 and 1928, repeal—
 hearings, 754, 4636
 report, 889
 culture, etc., publications, price list, 5417
 disinfection by gamma irradiation, dosimetry, tolerance, and shelf life extension, annual report, 5794
 Florida, marketing, 1966 summary, 7839
 fresh—
 acreage, production, etc., 5560
 prices, 1966, Chicago and New York City, 10203
 reducing transport damage in top-iced shipments in bushel baskets, 5646

Vegetables—Continued
 fresh—continued
 shipments by States, commodities, etc., 10873-874
 unloads—
 eastern cities, by commodities, States, etc., 7830
 for 41 cities, 7834
 midwestern cities by commodities, States, etc., 7832
 southern cities, by commodities, States, etc., 7833
 western cities, by commodities, States, etc., 7831

fresh market—
 acreage and estimated production, monthly report, 4034
 acreage, production, and value, 1959-65
 revised estimates, 14762
 market news, weekly summary, 3361
 gardening in Caribbean area, 15836
 home—
 canning, 15850
 freezing, 11930
 how to use USDA grades in buying, 5671
 insects and diseases in home garden, 10171
 irradiation preservation, 1784
 perishable agricultural commodities act, fair trading in vegetable industry, 13236
 processed—
 plants under USDA, continuous inspection, list, 16447
 standards for grades, 6135
 USDA inspection service, 11937
 processing—
 acreage, production, etc., 1959-65 revised estimates, 14761
 1966, annual summary, 5561
 statistical report, 4035
 seeds, foreign agriculture circulars, 3345
 shelf life, extending by use of radiation technology in postharvest procedures, 5792
 some good choices for thrifty family, variety selection and use, 9339
 spring, acreage market guide, 4661
 storing in basements, cellars, outbuildings, and pits, 5631
 summer and fall, acreage marketing guide, 7828
 vegetable situation, 4033
 vitamin A, good choice for thrifty family, selection, 9337
 vitamin C, good choice for thrifty family, selection, cook suggestions, 9338
 winter, acreage marketing guides, 962, 16441
 zinc deficiency in western crops, 5640
see also Horticultural products.

Vegetation:
 central Tibet, Chinese studies, 6558
 Cluj City area, Rumania, radioactivity, studies, 1299
 control, railroad beds, chemical methods, USSR study, 12704
 dune stabilization, on Outer Banks, N.C., 16523
 ground cover response on campgrounds after trampling, 14138
 understory, mowing in young teak plantation, 12574
 vegetation and hydrologic phenomena (series), 11171
 Yukon Flats region, Alaska, research report, 5725

Vegetative key to some common Arizona range grasses, 11141

Vehicle Systems Research Office, program, tire research related to safety (lecture), 9946

Vehicles:
 administrative wheeled, treatment, painting, etc., military standard, 4678
 electrical transmission, classification definitions, 18131

Vehicles—Continued

equipment components, Federal item identification guides for supply cataloging, supplements, 3285
 identification marking of combat and tactical transport vehicles, 12443
 mechanically powered hoisting vehicles, maritime safety data, 12765
 military, symbols to supplement text of instruction plates, military standard, 15197
 statistical technique for dynamic analysis of vehicles traversing rough yielding and non-yielding surfaces, 8407
 see also Airplanes—Electric vehicles—Firefighting vehicles—Lunar roving vehicles—Motor vehicles—Parking of vehicles—Rockets—Spacecraft
 Velasquez Huerta, Ramiro, relief, 13605, 17533
 Vela Uniform program:
 Project Dribble, Salmon event, seismic decoupling at nuclear level, 1808-10
 experiment, Tatum Salt Dome, Miss., 8911
 Velocity:
 air current, electronic-mechanical method of measuring, USSR study, 1178
 display, rectilinear, in spacecraft entry monitoring system, 14439
 flow, measurements, tracer-spark technique, structure of spark columns in hypersonic stream, 12856
 gas, measured by laser Doppler flowmeter, 6847
 high-velocity metalworking survey, 11428
 meteoric, ionization probability of iron particles, 11406
 minimum initial impulse under arbitrary initial vector, optimum transfer between 2 terminal points, 1427
 photographic method measures particles size and velocity in fluid stream, 6826
 pseudo-sonic, concept in 2-phase flows, 2712
 smoke-wave technique for measuring velocities in air, evaluation, 10293
 solids colliding at high speeds, interaction, USSR study, 16744
 stream with sinusoidally fluctuating velocity in longitudinal direction, drag measurements, 5749
 variable-length constant-velocity traveling magnetic wave plasma accelerator, experimental investigation, 18034
 velocities and streamlines, calculating for 2-dimensional, incompressible flow in axial blade rows, 5245
 velocity and concentration profiles in reverse osmosis systems, simultaneous development, 11218
 velocity-head coefficients in open channels, 1133
 wind velocity and temperature combinations, recurrence in lower 100-m layer of atmosphere, experimental calculation, 11563
 Velveten, cotton fabrics exports, trade agreement with Italy, 11845
 Venable, H. Dean, thermionic diode controlled power system, 1433
 Venango County, Pa., underground combustion oil-recovery experiments in Venango second sand, Reno pool, 11372
 Vending machines:
 business, starting and managing, 8679
 coin operated, current industrial reports, 13397
 current industrial reports, 4344
 Veneer lathe, 11308
 Veneer logs, see Logs.
 Veneer mills, closures hardwood face, Michigan and Wisconsin, 2308
 Veneers:
 Federal item identification guides for supply cataloging, supplements, 3288

Veneers—Continued

hardwood face, manufactured in Michigan and Wisconsin, distribution methods and end-uses, 8074
 recovery volume and value, computer program for calculating, 16644
 southern pine veneer cores, straight studs as byproducts, 8120
 veneer volume and grade recovery from ponderosa pine in southwest, 14115
 veneer yields from Lake States, quaking aspen, 1095
 Venereal diseases, fact sheet, 1966, basic statistics on problem in U.S., 10066
 Venezia, R., air pollutant emission inventory, 5439
 Venezky, D. L., protective coating for magnesium alloys, coordination chemistry of magnesium ion, 10013
 Venezuela:
 background notes, 1623
 economy, basic data, 5954
 long term forecasts of supply and demand of agricultural and livestock products, summary and evaluation, 12456
 mineral industry, minerals yearbook chapter, 12809
 Venous occlusion, see Embolism.
 Venous occlusive cuffs, effects of 9-alpha-fluorohydrocortisone and venous occlusive cuffs on orthostatic deconditioning of prolonged bed rest, 7365
 Ventana primitive area, mineral resources, 12604
 Ventilation:
 air handling systems and fire protection, 12594
 crossflow system for grain storages, 7248
 shipboard, for hazardous atmospheres, safety in industry, maritime safety data, 8299
 Venting, propellant tank, in zero-gravity environment, 5164
 Ventricles, see Heart.
 Ventricular fibrillations, multifocal premature contractions, ECG finding of grave significance, 15897
 Vents, toroidal ring prevents gas ignition at vent stack outlet, 9853
 Venue, civil action amendment, law, 428
 Venus (planet):
 atmosphere, investigation, 5276
 meteorology, summary of available knowledge, 11410
 nominal natural environment for advanced planetary mission programs, 8436
 physical properties, handbook, 14404
 Verde River, water supply outlook and snow survey, 4044
 Vereinigte Staaten von Amerika, Hinweise für die Zollabfertigung für Reisende ohne ständigen Wohnsitz in den Vereinigten Staaten, 13908
 Vermeer, James, cropland conversion program, description and appraisal, 9388
 Vermilion River and Valley:
 basin, engineer report—
 departmental edition, 4741
 document edition, 4479
 Vermont:
 area measurement report, 4269
 census of agriculture, 1964, State and county statistics, 7500
 census of mineral industries, 1963 area statistics, 5844
 county business patterns, 10351
 electric rate book, 11026
 mineral industry, minerals yearbook chapter, 1405
 postal map, 5392
 Vernon, Richard W., pressure characteristics of nonwetting, condensing flow of mercury in sodium-potassium-cooled, tapered tube, 1498
 Vertebrates, small, enzyme method of clearing and staining, 11605

INDEX 1967

Vertifelle, Elizabeth C., or heirs, relief, 610
 Vertigo, aviators, 17359
 Vesper, William H., behavior of beach fill and borrow area at Sherwood Island State Park, 13976
 Vessels, *see* Shipbuilding—Ships.
 Vessels (of vessels), *see* Implements, utensils, etc.
 Vested benefits, 5501
 Vestibular apparatus:
 adaptation to vestibular disorientation—
 eye-movements and subjective turning responses to 2 durations of angular acceleration, 15980
 responses to angular acceleration and to bilateral caloric stimulation following unilateral caloric habitation, 10322
 special effects of brief periods of visual fixation on nystagmus and sensations of turning, 15981
 humans and animals, USSR studies, 17864
 role of vestibular organs in space exploration, 5191
 Vestibular stimulation, disorientation, influence on adaptation of interrupting nystagmic eye movements with opposing stimuli, 7447
 Vestibular system, and human dynamic space orientation, 1428
 Vesting orders, German paintings, under trading with the enemy act, transfer to Germany, hearing, 741
 Vestnik of USSR Academy of Medical Sciences (periodical), 4036
 Vestnik of USSR Academy of Sciences (periodical), 4037
 Veterans:
 America's servicemen and veterans, legislative proposals, message from the President, 5993
 attention new veterans! older veterans! Veterans Employment Service will help you start or resume your civilian career, here are facts, 15220
 benefits—
 availability and eligibility requirements, legislation passed during 89th Congress, 1660
 available for veterans and dependents, fact sheet, 5586
 brief explanation, 11891
 for you from a grateful nation, 18250
 laws, compilation, 755
 slide chart calculator, 6045
 State laws, digests, 16345
 claims, settlement, agreement with Philippines, 17234
 code of Federal regulations, 11043
 county veteran population, Dec. 1966, estimates by States, 17233
 deceased or disabled, educational assistance for their sons and daughters, 17285
 disabled, benefits, 2966
 employment services, 1020
 home-buying guide, 17286
 home mortgage insurance, FHA, 11201
 hospitalized writing contest news, 5584
 jobs, now, about that job, A B C's for veterans, 14715
 laws, compilation, supplement, 1995
 legislative recommendations of organizations, hearings, 9172
 loans, VA guaranty and direct programs for housing, hearings, 12319
 medical care, history of Veterans' Administration medical program, 12318
 national service life insurance, regular dividend schedules, 8780
 nursing home care in Alaska and Hawaii, eliminate certain requirements, report, 6007
 pensions and readjustment assistance act of 1967—
 law, 16133
 report, 14963

Veterans—Continued
 readjustment assistance, permanent program of education, etc., allowance increase, etc.—
 hearings, 7758, 10859
 law, 16133
 report, 10792
 reemployment rights, information sheet, 17288
 United States, census 1960, personal, family, housing characteristics of men who served in Armed Forces during war and peace, 9175
 Vietnam conflict—
 additional wartime benefits, hearings, 7759
 pension and readjustment act of 1967, report, 7712
 Vietnam disabled, rehabilitation (remarks), 18143
 Vietnam era readjustment assistance act, reports, 4507, 4596
 World War I, loans made upon security of adjusted-service, certificates, cancel certain unpaid interest—
 law, 449
 report, 918
see also Life Insurance—Pensions.
 Veterans Administration:
 acquired residential properties, savings possible by consolidating management, GAO report, 11158
 appropriations, 1967, supplemental, hearings, 2040
 appropriations, 1968—
 hearings, 9145, 15147
 reports, 10600, 15131
 benefits in brief, serving those who served, 11891
 building management officers, career opportunities, etc., 18249
 brain research, 8733
 career opportunities—
 manual arts therapists, 14713
 practical nursing, 10127
 psychology, examination announcement, 12113
 careers in automatic data processing, 17287
 cost reductions, 5587
 hospital and medical program, operations, 9173
 hospital, location in Riverside-San Bernardino area, Calif., establish, hearings, 10682
 hospitals—
 construction, modernization, employee benefits, etc., hearings, 9174
 veterans' views on medical care, 1967 survey, 10683
 hospitals and clinics, corrective therapists, career opportunities, 15816
 housing loans guaranteed in Illinois, potential savings by revising procedures relating to default, GAO report, 11151
 land conveyance to—
 Batavia, N.Y.—
 law, 12167
 reports, 703, 6004
 Pinellas County, Fla.—
 law, 369
 report, 900
 Temple, Tex., report, 6006
 Tennessee for use of Memphis State University, hearing, 9326
 laws administered by, compilation, 755
 librarians, examination announcement, 10411
 loan guaranty and direct loan programs, etc., hearings, 12319
 management internships, 8781
 manual, 8780
 medical care of veterans, history of VA medical program, 12318
 medical research program 1966, synopsis, 2963

Veterans Administration—Continued
 medical research, reports, 4563, 7218
 medical training, major contribution to
 Nation's health resources, 8782
 mortgage foreclosures, handling by Justice
 Department
 hearings, 15031
 report, 14947
 nursing home care programs, operation,
 hearings, 15050
 personnel information bulletin, 3681
 publications, index, 2961, 17282
 purchasing, VA invites you to submit your
 product or service, 2965
 report, 1966—
 departmental edition, 7217
 document edition, 5979
 research into spinal cord injuries, law, 419
 research monographs, 17283
 technical reports, 13171
 these are yours, salary, life insurance, etc.,
 employee information, 15815
 training and education of health service
 personnel—
 clarify responsibility, law, 489
 Public law 89-785, lack of implementation,
 hearings, 16344
 VA-Armed Forces Pulmonary Diseases Re-
 search Conference, transactions, 13172
 VA monographs, 17284, 18247
 VA pamphlets, 1661, 2964-66, 5587, 7219,
 8781-83, 10127, 13173, 14710-713,
 16815-817, 17285-287, 18248-250
 you and VA employee's guide, 2964
 Veterans Administration Center, Dayton,
 Ohio, residency training in internal medi-
 cine, 15818
 Veterans' Affairs Committee, House:
 calendar, 3485
 committee prints, 755, 4563, 9173, 9175,
 10683, 12518, 16345
 hearings, 7758-59, 9172, 9174, 10681-682,
 12319, 13718, 15050, 16344, 17613
 investigations and studies—
 authorization, report, 6019
 expenses, report, 7720
 reports, 703, 4496, 4507, 6004-7, 7709,
 7712
 Veterans Appeals Board, rules of practice,
 14710
 Veterans Canteen Service, Veterans Admin-
 istration, examination of financial state-
 ments, 1966, GAO examination, 4865
 Veterans hospitals:
 amendments of 1966, law, 489
 building management officers, Veterans
 Administration, career opportunities,
 etc., 18249
 career information for—
 librarians, 18248
 manual arts therapists, 14713
 occupational therapists, 14712
 social workers, 14711
 Columbia, S.C., operation, hearing, 13718
 construction, modernization, employee
 benefits, etc., hearings, 9174
 dietetic internship, 13173
 location in Riverside-San Bernardino area,
 Calif., establish hearings, 10682
 medico-moral ethics for hospital ministry
 (papers), 15817
 operations of VA program, 9173
 use of Veterans Memorial Hospital, grants-
 in-aid for medical care, etc., agreement
 with Philippines, 14685
 VA nursing home care programs, opera-
 tion, hearings, 15050
 veterans' views on medical care, 1967 sur-
 vey, 10683
 volunteer workers, handbook, 1661
 Veterans of Foreign Wars of United States:
 convention proceedings, 9054
 legislative program, hearings, 9172
 Veterans organizations, legislative recom-
 mendations, hearings, 9172
 see also names of organizations.

Veterinarians:
 Agriculture Department, career opportuni-
 ties, 5657
 careers in Public Health Service, 18156
 examination announcement, amendment,
 12100
 trainee, summer employment for juniors
 in veterinary medicine, examination an-
 nouncement, 17463
 Veterinary Biologics Division, notices, 5619,
 15832
 Veterinary instruments and apparatus,
 equipment and supplies, Federal item iden-
 tification guides for supply cataloging,
 supplements, 3290
 Veterinary medicine:
 Bulgaria, problems, 1208
 education facilities, construction grants
 and student loan program, law, 423
 role in future (remarks), 13253
 Veterinary supplies, see Veterinary instru-
 ments and apparatus.
 Veterinary zoology, see Zoology.
 Vette, James L., models of trapped radiation
 environment electrons at synchronous alti-
 tudes, 8437
 VFR, see Visual flight rules.
 VHF, see Omnilanguages.
 Viaje por un nuevo mundo de manjares,
 visite los Estados Unidos, 17280
 Vibration:
 analysis of cylindrically curved panels
 with simply supported or clamped edges,
 5263
 analysis utilizing Mossbauer effect, 17962
 axisymmetric—
 paraboloidal shells of revolution, differ-
 ential equations, 17946
 partially liquid-filled cylindrical con-
 tainers, 12942
 channel, monitoring system determines am-
 plitudes and time, 8479
 compressor blades, reduced by wire ma-
 terial, 6824
 concrete, study, review of literature,
 13985
 coupled vibration and dissociation relaxa-
 tion behind strong shock waves in car-
 bon dioxide, 6908
 diseases, prophylaxis, USSR study, 11265
 earth, from nuclear explosion in salt dome,
 Project Dribble, Salmon event, 8911
 heat exchanger tubes supported in high
 vibration environment, 5220
 hollow elastic cylinder bonded to thin
 casing of different material, 18048
 in space vehicles, 17705
 loads, cushioned by friction brake, 6771
 longitudinal and torsional, in nonuniform
 multibranch beams, matrix analysis,
 6886
 matrix-holzer analyses for fully-coupled
 vibrations of clustered launch-vehicle
 configurations, 5158
 measured dissociation-rate constants and
 their effects on coupled vibrational-dis-
 sociational flows of oxygen over wedge,
 interpretations, 12943
 measurement of low frequency, vibrations
 in big helicopters and their transmission
 to pilot, 11564
 mechanical, effect on performance of super-
 conducting magnets, 11511
 molecular vibrational frequencies, tables,
 8524, 18077
 Monticello Dam studies, 17181
 nonlinear flexural vibrations of thin-
 walled circular cylinders, 14482
 pressurized torus shell, study, 16907-908
 prestressed shells of revolution, 6878
 rectangular plates with various boundary
 conditions, effect of edge loadings, er-
 rata, 12919
 reducing machinery vibration by use of
 post-stressed concrete foundation, 15489

INDEX 1967

Vibration—Continued

- rocket engine, accurately measured by photography, 6812
- shock and vibration monograph series, 17705
- structural, interaction with sound fields, 9835
- system precisely controls oscillation of vibrating mass, 16938
- test platform, produced limitations on inertial sensor testing, 1492
- testing, air spring suspension system, automatically controlled, 9881
- upper and lower bounds for eigenvalues of vibrating beams with linearly varying axial load, 2609
- vibrating slope method for measuring concrete workability, 4742
- Vibration mounts, resonant frequency can be adjusted, 6829
- Vibrators, elapsed operating time, automatically controlled, 15548
- Vibratory compaction of mine hydraulic backfill, 974
- Vice President of United States: election campaign fund act—laws, 513, 9177, 12168
- legislative histories, 7762, 13719
- reports, 702, 10614
- Senate amendments, summary, 4567
- elections, amend equal time provisions of communications act, hearings, 16400
- Vicino, Frank L., decision making with updated graphic vs. alpha-numeric information, 10282A
- Vicksburg, Miss., Mississippi River and tributaries in district, stages and discharges, 12477
- Victorella, new species from southern California, 9953
- Vidal Santiago, Jorge S., relief, 13746
- Video display systems, see Display systems.
- Video recording system, recording and time expansion technique for high-speed, single-shot transient video signal, 11465
- Videon, F. F.: apparent crater studies, 4237
- crater measurements, 4236
- Vidicons, IR scanner monitors many test points, 15545
- Vientiane, Laos, plain, socio-economic study, 6578
- Viet Cong terror tactics in South Viet-Nam, 17218
- Viet-Nam, see Vietnam.
- Vietnam: answering aggression in Viet-Nam (remarks), 18228
- Armed Forces members voluntarily extending tour of duty in hostile fire area, authorize special 30-day period of leave—
- hearing, 716
- law, 448
- Asia, Pacific and United States, hearing, 6099
- background information, revision, 13860
- central issue (discussion), 18229
- central, slash-burn agriculture among mountain tribes, 14246
- commercial commodity import program, followup investigation, report, 14997
- commodity import program, U.S., foreign aid, improper practices, hearings, 10844
- conflict, effect on economy—
- hearings, 12187
- report, 13814
- conflict servicemen and veterans act of 1967, message from the President, 5993
- dear student leaders, correspondence exchange on Viet-Nam, 7143
- French reactions to American involvement, 5703
- Hungarian Journalist reports on war, 4988

Vietnam—Continued

- imports, commercial, AID's management and operation of program, GAO review, 15302
- in brief, U.S. commitment, etc., 14674
- income tax administration, agreement, 15775
- information notes (series), 8713-16, 11822-824, 13187, 14672-673, 17218-219
- maps, including indexes, etc., 16153
- print as House document, reports, 16228, 16359
- Marine Corps small unit action, 8332
- news policies, hearings, 953
- North—
- air war against, hearings, 16394
- bombings of civilians by U.S., reports by pro-Communist eyewitnesses, 4955
- Cuban correspondents report, 15410
- East German couple interviewed North Vietnamese on Vietnam war, 12672
- East German couple reports on trip to North Vietnam, 11266
- Italian physicist tells of culture and civilization as bombs fall, 12699
- Madeleine Riffaud, Communist reporter, reports her visit, 1294
- mineral industry, minerals yearbook chapter, 11358-359
- translations, 3964
- trip of Harrison E. Salisbury, hearing, 6105
- off-shore fishery development, agreement, 17238
- path to Viet-Nam, lesson in involvement (address), 17220
- port situation, followup investigation, report, 14998
- postal services of U.S. Armed Forces, on-site inspection, report, 4505
- Republic—
- agricultural commodities, agreement, 2902, 7179, 8734, 15753, 15804
- airlift and sealfit to South Vietnam, report, 10809
- American civilians, application of Uniform Code of Military Justice, 16334
- Army area handbook, 13297
- background notes, 11820
- basic data, 8713, 18822
- climate, annotated bibliography, 16539
- Communist-directed forces in South Viet-Nam, 8715, 13137
- Communist insurgent infrastructure, organization and strategy, 13298
- construction activities of United States, GAO report, 11159
- economy, basic data, 7577
- enemy threat, free world forces (other than U.S.), revolutionary development program, and economy, report, 10811
- free world assistance, 8716
- mineral industry, minerals yearbook chapter, 11358-359
- minority groups, ethnographic study series, 5735
- national reconciliation in South Viet-Nam, 14673
- political development, 11823
- rehabilitation, other war in Vietnam, progress reports, 1151, 1627
- relations of South Vietnam in faith and fact, 14587
- shipping policy review, hearing, 743
- tunnels, environmental characteristics, 15229
- U.S. Army status, report, 10814
- Viet Cong terror tactics in South Viet-Nam, 17218
- search for peace in Viet-Nam, 8714, 14672
- selected bibliography, 15805
- South, see, above, Republic.
- undeclared war, assistance to enemies of U.S., make punishable, reports, 2017, 2019, 10618, 12263

Vietnam—Continued

United States—

- agencies audit and inspection programs, 1966, State Department International Development Agency, Defense Department, GAO review, 9553
- economic program, illicit practices affecting, followup investigation, report, 14996
- Govt. personnel in high-risk situation, additional benefits, report, 9295
- veterans of conflict—
 - additional wartime benefits, hearings, 7759
 - pension and readjustment act of 1967, report, 7712
 - veterans returning disabled, rehabilitation (remarks), 18143
- Vietnam era veterans' pension and readjustment assistance act of 1967—
 - law, 16133
 - reports, 4507, 4596, 14963
- Vietnam in brief, U.S. commitment, etc., 11825
- war, economic impact of Vietnam (remarks), 10453
- why we fight in Viet-Nam, 11824
- Vietnam Week, Communist origin and manipulation, report, 7757
- Vietnamese language, basic courses, 7195, 10106
- Viets, Frank G., Jr., zinc deficiency of field and vegetable crops in West, 5640
- Viewers (photography):
 - devices for photo interpretation, relative effectiveness, 10283
- Vigilance:
 - auditory, as affected by signal rate and intersignal interval variability, 11346
 - effects of signal patterning upon vigilance performance, 8555
 - human and animal, bibliography and index, 9753
 - performance and physiological responses under fixed and variable schedules, 14590
 - signal presentation rate, auditory threshold and group vigilance, 11349
- Vignette of mountain peasant life, 15376
- Vila, Enrique A. Rojas, *see* Rojas-Vila, Enrique A.
- Villagomez, Joaquin U., relief, 538
- Vilna, Lithuania, travel to Vil'nyus, Finnish brochure, 15429
- Vil'nyus, *see* Vilna, Lithuania.
- Vincent, Thomas L., treating optimal trajectories with restricted segments, 9805
- Vincent, W. S., International Symposium on Nucleolus, structure and function, 7074
- Vines, woody, for southern Great Plains, selecting, planting, etc., 1688
- Vinti, John P.:
 - differential corrections applied to his accurate reference satellite orbit with inclusion of 3d zonal harmonic, 15564
 - orbital prediction and differential correction using Vinti's spheroidal theory for artificial satellites, 8482
- Violation investigation and reporting, FAA handbook, 2233
- Virgin Islands:
 - agriculture departments, 1967 directory, 7836
 - climatological data, 3096
 - coast pilot, 17467
 - supplement, 7553
 - coastal warning facilities chart, 11905
 - commemorative air mail postal card (poster), 7039
 - county business patterns, 13385
 - dutiable status of watches, etc., amend tariff schedules—
 - law, 509
 - report, 911
 - Governor, etc., popular election, amend organic act—
 - hearings, 10852

Virgin Islands—Continued

Governor, etc.—Continued

- report, 10751
- Governor, 1966 annual report, 14195
- nautical chart catalog, 4415
- nurses in public health, number, educational preparation, etc., 17155
- social security tax guide for employers, 2402
- soil survey laboratory data and descriptions, 14661
- U.S., our Caribbean gems, description, history, etc., 18240
- Virgin Islands Corporation:
 - audit report, 14927
 - federally owned electric power and salt water distillation facilities, sale to government of Virgin Islands, GAO review, 8146
 - financial statements, 1966, GAO examination, 14151
- Virgin Islands National Bank, permit Edward C. Bower to serve as director prior to obtaining U.S. citizenship, 252, 782, 4497
- Virginia:
 - area measurement reports, 5815, 12035
 - census of agriculture, 1964, State and county statistics, 16036
 - census of manufactures, 1963, area statistics, 1853
 - census of mineral industries, 1963, area statistics, 5845
 - climatological data, 3096
 - county business patterns, 4320, 13382
 - fossil marine mammals from Miocene Calvert Formation, 1530
 - landings, fish and shellfish, 4038
 - annual summary, 16618
 - mineral industry, minerals yearbook chapter, 6669
 - precipitation data, hourly, 3401
 - timber resources, survey report, 15290
 - transit compact, approval—
 - hearing, 2132
 - law, 478
 - report, 654
- Virginia Stage Lines, Inc., motor carrier accident, 6476
- Viral coefficients, *see* Coefficients.
- Virology, *see* Viruses.
- Viruses:
 - biochemistry of viruses, USSR study, 15364
 - effect on chromosome rearrangements and mitotic activity in cells of human tissue cultures, USSR study, 4963
 - electron microscope technique, use in oncogenic virology, 8269
 - etiology of human leukemias, recent research, Rumanian studies, 6549
 - infectious, and tumor interaction, quantitative aspects, USSR study, 6580
 - research on evolution of virus theory of tumor origin, USSR study, 9655
 - Rous sarcoma, cystic lymphadenopathy of rats, pathogenesis, USSR study, 6554
 - simians, Rumanian studies, 6529
 - Soviet—
 - research in virology, 4903
 - studies, 9616
 - SV 40 virus, simian vacuolating agent, Polish study, 9653
 - tumor, and cell structure, virological studies, USSR, 6562
 - use of modified live virus vaccines to prevent hog cholera, GAO review, 9549
 - USSR studies, 6516
 - viral antibody production in animals exposed to space cabin environment, 74
 - viruses in oncology, USSR study, 14258
 - see also* Polyoma virus—also names of virus diseases.
- Visa Office, annual report, 2878
- Vis-A-Plan (visualize a plan) management technique provides performance-time scale, 15531

INDEX 1967

Visas, *see* Passports.
Visco seal design offers zero-leakage and wear-free characteristics, 8470
Viscosimeters :
absolute viscosity measured using instrumented parallel plate system, 8467
capillary tube bore nonuniformity, correction, 14337
physical parameters for use in absolute gas viscosimeter, 11378
stainless steel coiled-capillary, steady-state laminar flow boundary conditions, 14350
Viscosity :
absolute, measured using instrumented parallel plate system, 8467
coefficients of dilute nitrogen and oxygen, 5293
dilute neon, krypton, and xenon, 11589
mix ratio for adhesives, use of flowmeter to determine, 17988
standard lead-silica glass, 1520
supersonic aerodynamics, effects, handbook, 1542
surface, of polydimethylsiloxane monolayers, 8592
Viscous flow, *see* Flow.
Visibility, improving during periods of supercooled fog, 7381
Vision, *see* Binocular vision—Eyes—Sight.
Visiting housekeepers :
homemaker services—
conference on personal care, 5460
how it helps children, 7512
Visitors :
international, plant tours for welcoming to U.S. listing, 11888
meet Americans at home, 10126
tax information for visitors to United States, 9600
VISTA, *see* Volunteers in Service to America.
Visual acuity, *see* Acuity.
Visual aids :
flexible containers inspection, 13901
graphic presentation, management tool, development of visual aids, handbook, 17691
metal containers inspection, 4662
rigid and semirigid containers inspection, 13900
USDA-C&MS visual aid series, 4662, 13901
Visual attitude orientation and alignment system, 11457
Visual flight rules, aviation, air traffic patterns, 17740
Visual illusions and aircraft accidents, 11958
Visual instruction, using visuals in agricultural extension programs, 16569
Visual perception, *see* Perception.
Visual signals, 5727
Vital force, energy, requirements of normal adults residing at 4300 meters for 28 days, 14806
Vital partnership, 9010
Vital statistics :
analytical studies, 5466, 7097, 8659, 17167
data evaluation and methods research, 2842, 7096, 8657-58, 11762, 13098
data from national health survey, 5467-70, 7098, 8660-61, 10067-69, 11763-764, 13099, 14637-639, 17168-170, 18188-189
data from National Vital Statistics System, 5471, 8662, 15715, 17171-172
provisional, monthly report, 3582
United States, 7099, 10070, 15716-717, 18190
see also Birth—Death—Still-birth.
Vitamins :
essential for growth of channel catfish, 8042
mechanism of artificial abortion by use of ascorbic acid, USSR study, 1276
salmon, diets, studies of vitamin levels, supplements, FDA fact sheet, 6359

Vityaz (USSR ocean survey ship) :
biological problems studied, 11269
measurement of propagation velocity of elastic oscillations in surface layer of Indian Ocean water, 15353
Vocational education :
amendments of 1966, hearings, 4532
area vocational schools, vital part of Nation's educational system, 4707
bibliography, annotated, selected references, 1917-66, below college, 9414
bulletin, 7889
determining courses of study, 1017
improve programs—
hearings, 7742, 9153, 12419, 17664
reports, 9118, 10557
Indians, adult, program, appropriations, increase, report, 15079, 16283
Job Corps men's urban centers, vocational course entry requirements, 12448
new directions, case studies in change, 17719
programs, administration, rules and regulations, 7889
student loan insurance act of 1965—
amend, hearings, 15026
eligible institutions, list, 2181
supplement, 6181
program, payment tables and amortization schedules, 7910
vocational and technical institute, establish in D.C.—
law, 495
report, 693
vocational-technical program development, State reports, 6196
Vocational guidance :
counselor's desk aid, 18 basic vocational directions, summary information, 13969
interest check list, instructions for administering and using, 16516
services for New York City women, 5599
staff, guidelines for organization and operation of vocational evaluation units, training guide, 11892
Vocational rehabilitation, *see* Rehabilitation of the disabled.
Vocational Rehabilitation Administration :
annual report, 11894
grant programs, progress report, 5589
research and demonstration projects, 1967, annotated list, 10130
Voegelein, L. Belle :
classification—
class G, geography, anthropology, folklore, manners and customs, recreation, 5086
class L, education, 5087
class Q, science, 9749
class R, medicine, 5088
class U, military science, 2528
Vogel, James A., cardiopulmonary responses of resting man during early exposure to high altitude, 7413
Vogler, Raymond D., investigation over moving ground plane of transport airplane model, etc., 14477
Vohr, John, superlaminar flow between non-concentric rotating cylinders, 12852
Voice communication, partially masked by noise, transcriber confidence in relation to accuracy of transcription, 5751
Voice of America, 5-cent commemorative postage stamp (poster), 13051
Voice of the silent stage, 4725
Volatilization, *see* Evaporation.
Volcanic ash, tuff, etc. :
ash-flow sheet, compositionally zoned, in southern Nevada, 1120
ash flows associated with Creede caldera, San Juan Mountains, Colo., 8166
Irazú Volcano, ash eruptions and erosion control problems, 16686
Volcanic rocks, *see* Igneous rocks.
Volcanoes :
Hawaiian Observatory summary, 3391

Volcanoes—Continued

- United States, general information, 2373
- volcanic hazards at Mount Rainier, Wash., 9562
- Volkin, Howard C., generalized potentials for scattering, 11543
- Vollmer, Bernhard, relief, 7634, 13485, 13733
- Volsky, Jorge A., relief, 573
- Voltage dividers, calibrated by simple device, 5145
- Voltage regulators:
 - low-input voltage converter/regulator minimizes external disturbances, 6843
 - voltage regulator/amplifier is self-regulated, 11480
- Voltagers:
 - distortion effect of SNAP-8 alternator speed controller and alternator performance results, 12950
 - electronic circuit provides accurate sensing and control of dc voltage, 8396
 - hazards of low voltage electricity, 9711
 - high voltage calibration facility, design and operation, 5292
 - quadrature, at variable frequencies, use parallel-T network for developing, 5361
 - surveillance of volt maintained by saturated standard cells, design, 17042
- Voltaic couples, thermogalvanic couples, parameters, USSR study, 1241
- Volume and yield tables:
 - Crossett farm forestry forties, 1966 harvest, 8098
 - Douglas-fir total cubic-foot volume table, formula, 1092
- Hawaii hardwoods, multivariate equations developed for volume prediction, 8084
- managed stands of lodgepole pine in Colorado and Wyoming, 11140
- Volume-ratio calibration system for vacuum gages, 6802
- Volumetric analysis, titrimetry, report, 14518
- Voluntary foreign aid programs, reports of American registered agencies, 2410, 12655
- Voluntary help wanted for war on poverty projects, 9386
- Voluntary program for direct investments, status and prospects, 5964, 7585
- Volunteer workers:
 - competence in telling story of the handicapped (remarks), 18140
 - join VISTA and see the world, 10909
 - older volunteers in Peace Corps, 5381
 - Peace Corps, 5th annual report, 7036
 - public welfare departments, opportunities for volunteers, 13184
 - veterans hospitals, handbook, 1661
 - wanted volunteers, facts to face about our country's youth, 4728
- Volunteers in Service to America:
 - amendments to economic opportunity act, 498
 - law, 498
 - narrative summary, 9382
 - career planning booklet, 6162
 - fact book, 6167, 16484
 - handbook, 4694
 - join VISTA and see the World, 10909
 - retired teachers, opportunity to reach the forgotten through VISTA, 15208
 - VISTA, at my age? 10914
- VISTA serves:
 - summary, 4695
 - urban ghetto, rural America, Appalachia, etc., 6168
- VISTA volunteer (periodical), 4039
- who, what, where, when, why, how, 6169
- Volz, Marvin D., systems and equipment for packaging and price marking meat and poultry in retail food stores, 7276
- von Hake, Carl A., United States earthquakes, 12121
- von Oberndorff, Elisabeth, relief, 837

- Von Rosenberg, C. W., stall barrier as new preventive in aviation accidents, 1823
- von Stroebel, James M., basic data on economy of Argentina, 4483
- Von Wedel, Frances, claim, 16178
- Voprosy astrofiziki (USSR periodical): translations, 15582
- Vorhls, Robert C., hydrologic effects of earthquake of Mar. 27, 1964, outside Alaska, 11177
- Voronezh State University, USSR, living and study conditions of Chinese postgraduate students, 4954
- Voroshilovgrad, Ukrainian SSR, Lugansk locomotive-building plant, bookkeeping organization, USSR study, 1293
- Vortex flow, confined magnetohydrodynamic, analysis, 2606
- Vortex motion:
 - non-rotating vorticity meter, 16910
 - tip, core thickening for application to helicopter rotor noise reduction, 4220
- Vortex valves, *see* Valves.
- Voskhod, *see* Spacecraft.
- Voting:
 - Arkansas State Advisory Committee, report to Civil Rights Commission, 13434
 - Federal voting assistance act of 1955, amend. report, 13817
 - information bulletin, Armed Forces Information and Education, 4040
 - residency voting act of 1967—
 - hearings, 13884
 - message from the President, 10523
 - report, 15108
 - see also* Elections—National Labor Relations Board
- Voting function, *see* Mathematics.
- Voyager, *see* Satellites—Spacecraft
- V/STOL (vertical or short takeoff and landing), *see* Aircraft—Airplanes.
- VTOL (vertical takeoff and landing), *see* Aircraft—Airplanes.
- VULCAN (digital computer depletion program), *see* Electronic computers.

W

- W series, 4058
- W.S. series, 3361
- Waananen, Arvi O., water resources of California, 1214
- Waddel, Ramond C., relay I radiation experiment, 1452
- Wade, James E., radiation monitoring, programmed, instruction book, 15973
- Wade, William R., simulated space environment effects on thermal radiation characteristics of black coatings, 16980
- Waesche, Russell R., nomination, hearings, Wage and Hour and Public Contracts Divisions:
 - interpretative bulletins, 11897, 13178
 - regulations, 15519
 - services to public, 1666, 8789
- Wage chronology, *see* Wages.
- Wage-hour law, *see* Labor standards.
- Wages:
 - accrued vacation pay, deductibility, extend time, law, 406
 - area survey—
 - Akron, Ohio, 17892
 - Albany-Schenectady-Troy, N.Y., 12772
 - Albuquerque, N. Mex., 12770
 - Allentown-Bethlehem-Easton, Pa.-N.J., 11324
 - Atlanta, Ga., 14291
 - Baltimore, Md., 8309
 - Beaumont-Port Arthur-Orange, Tex., 14294
 - Birmingham, Ala., 14286
 - Boise City, Idaho, 17897
 - Boston, Mass., 5069
 - Buffalo, N.Y., 11311
 - Burlington, Vt., 11323
 - Canton, Ohio, 11328

INDEX 1967

Wages—Continued

area survey—continued
 Charleston, W. Va., 12771
 Charlotte, N.C., 14287
 Chattanooga, Tenn.-Ga., 5062
 Chicago, Ill., 14293
 Cincinnati, Ohio-Kentucky-Indiana, 12769
 Cleveland, Ohio, 5066
 Columbus, Ohio, 6607
 Dallas, Tex., 6611
 Danport-Rock Island-Moline, Iowa-Ill., 6606
 Dayton, Ohio, 11316
 Denver, Colo., 8311
 Des Moines, Iowa, 11315
 Detroit, Mich., 11319
 Fort Worth, Tex., 8307
 Green Bay, Wis., 5061
 Greenville, S.C., 14288
 Houston, Tex., 16819
 Indianapolis, Ind., 8314
 Jackson, Miss., 11314
 Jacksonville, Fla., 9745
 Kansas City, Mo.-Kans., 8305
 Lawrence-Haverhill, Mass.-N.H., 15440
 Little Rock-North Little Rock, Ark., 1361, 17896
 Los Angeles-Long Beach and Anaheim-Santa Ana-Garden Grove, Calif., 12773
 Louisville, Ky.-Ind., 11320
 Lubbock, Tex., 14295
 Manchester, N.H., 1362, 17895
 Memphis, Tenn.-Ark., 9746
 Miami, Fla., 8310
 Midland and Odessa, Tex., 15441
 Milwaukee, Wis., 14296
 Minneapolis-St. Paul, Minn., 11313
 Muskegon-Muskegon Heights, Mich., 14292
 New Haven, Conn., 11312
 New Orleans, La., 11322
 New York City, 16817
 Newark and Jersey City, N.J., 11326
 Norfolk-Portsmouth and Newport News-Hampton, Va., 16816
 Oklahoma City, Okla., 2503
 Omaha, Nebr.-Iowa, 6605
 Paterson-Clifton-Passaic, N.J., 15438
 Philadelphia, Pa.-N.J., 9743
 Phoenix, Ariz., 11329
 Pittsburgh, Pa., 11317
 Portland, Maine, 5070
 Portland, Oreg.-Wash., 15442
 Providence-Pawtucket-Warwick, R.I.-Mass., 14290
 Raleigh, N.C., 2504
 Richmond, Va., 8304
 Rockford, Ill., 14289
 St. Louis, Mo.-Ill., 8306
 Salt Lake City, Utah, 8312
 San Antonio, Tex., 16818
 San Bernardino, Riverside, Ontario, Calif., 5067
 San Diego, Calif., 6610
 San Francisco-Oakland, Calif., 9744
 San Jose, Calif., 5053
 Savannah, Ga., 15439
 Seattle-Everett, Wash., 6609
 Sioux Falls, S. Dak., 5065
 South Bend, Ind., 11327
 Spokane, Wash., 16815
 Tampa-St. Petersburg, Fla., 2505
 Toledo, Ohio, 11321
 Trenton, N.J., 8313
 Washington, D.C.-Md.-Va., 5068
 Waterbury, Conn., 11325
 Waterloo, Iowa, 6608
 Wichita, Kans., 5064
 Worcester, Mass., 15443
 York, Pa., 11318
 Youngstown-Warren, Ohio, 8308
 chronology—
 Aluminum Company of America, 16821
 American Viscose Corp., 16822

Wages—Continued

chronology—continued
 Armour and Co., 1359
 Berkshire Hathaway Inc., 14297
 bituminous coal mines, 16820
 Chrysler Corporation, 14285
 directory, 11331
 Firestone Tire and Rubber Co. and R. F. Goodrich Co., Akron Plants, 8301
 General Motors Corp., 2506
 International Paper Company, Southern Kraft Division, 8315
 Lockheed-California Company, 9742
 Western Union Telegraph Co., 14299
 collective farmers, improved, USSR study, 2475
 community surveys, 6615
 comparison with OASDHI retirement benefits, 1966 experience, 8690
 current developments, 3173
 earnings mobility of MDTA trainees, 11296
 earnings, present value of estimated lifetime earnings, 13401
 earnings series, manufacturing, 1939-66, summary, 12775
 earnings statistics, 1909-66, United States, 2496
 employee earnings—
 and hours in retail trade, 8302
 retail trade, 11332
 South, metropolitan areas, 5071
 employment and earnings, and monthly report on labor force (periodical), 3232
 employment and earnings statistics, 1939-66, for States and areas, 14283
 equal pay, activity in State legislatures, 2974
 fair labor standards act—
 equal pay for equal work, 11897
 handicapped clients in sheltered workshops, wage payments, technical report, 18252
 handy reference guide, Spanish edition, 5590
 how to keep time and pay records, 8786
 minimum wage standards—
 amendments, report, 7228
 evaluation and appraisal, report, 2971
 overtime pay, computing, highlights, 11895
 farm labor developments, 3264
 employment and wage supplement, 3265
 garnishment, prohibit, hearings, 17594
 historical data on hours and earnings, selected references, 8323
 hourly—
 index for hydraulic turbine establishments, 3413
 indexes of change for shipyards, 3414
 industry surveys—
 communications, 6604
 fertilizer manufacturing, 12774
 hospitals, 15448
 industrial chemicals, 2502
 laundry and cleaning services, 14298
 motion picture theaters, 11330
 synthetic fibers, 8317
 textile dyeing and finishing, 2501
 women's and misses' dresses, 6613
 wool textiles, 15446
 industry wage and union scale studies, 1955-66, directory, 5072
 Japan and United States, similarities and contrasts, 16827
 Japan-United States joint study, 2489
 maintenance employees at region 6 housing authorities, HUD, GAO review, 2349
 manufacturing earnings series, 1939-June 1966, summaries, 5083
 manufacturing industry, developments, summary, 4041
 minimum—
 application in agriculture, hearing, 7732
 District of Columbia law, amend.,—
 law, 398
 report, 4504

Wages—Continued

minimum—continued
retail trade, study to measure effects of 1961 amendments, 5591
State laws and orders, fringe benefit provisions, 5598
naval installations, relief of civilian employees erroneously paid, report, 4581
net spendable earnings, monthly release, 3619
new pay scales for scientific and technical workers in Bulgaria, 1303
nonagricultural industries, measurement, 1825
nonmetropolitan areas of South and North Central regions, 15447
occupational earnings and wage trends in metropolitan areas, 11334, 16530, 17899
occupational groups in metropolitan areas, trends, 17901
publications, list, 3623
railroad employees, class 1 railroads, 4042
rate determinations for construction of Carters Dam, Ga., Labor Dept., GAO review, 4878
respective roles of monetary, fiscal and wage price guidepost policies in 1967 (remarks), 1965
seafaring wage rates, Atlantic, Gulf and Pacific districts, 14313
seamen, recommendations of ILO convention, withdrawal of treaty, text, 15064
social security deductions, establishment reporting plan, 1604
students, full-time employment at special minimum wages, 7229, 18251
sugar act of 1948, as amended, 1967 wage requirements, 8844
Spanish edition, 8845
sugar, rate determination, 3911
supplementary compensation, selected references, 5082
telephone company employees, FCC rules and regulations, 3279
union—
building trades, 14301
local-transit operating employees, 14300
motortruck drivers and helpers, 15444
printing industry, 15445
wage board employees, adjusting pay rates, hearings, 12425, 16432
wage calendar for 1967, changes, fringe benefits, etc., 5081
wage indexes, long-term trend data for selected occupations and metropolitan areas, 5059
wages and related benefits—
metropolitan areas—
occupational earnings, supplementary practices, 5058
revised pages, 16814
United States and regional summaries, 14284
women, equal pay under Fair labor standards act as amended, 7224
workers covered by State unemployment insurance laws, 3233
see also Payroll deductions.
Wages and Industrial Relations Division, publications, list, 3623
Wagner, A. James, objective numerical prediction out to 6 days using primitive equation model, test case, 12479
Wagner, Bartlett A., planetarium, elementary-school teaching resource, 5278
Wagner, Bernard, housing in Jordan, 6420
Wagner, C. A., use of resonant vibrating orbits in satellite geodesy, 14476
Waisman, Don A., foreign trade regulations of Brazil, 17479
Waists, make waistline fit on pants, 7282
Wait, J. R.:
radio science, 3803
radio science, Journal of research, 2736

Walte, Charles L., cerebral air embolism, 12793
Walte, Paul J., climates of States, Iowa, 9425
Wakes, their structure and influence upon aerodynamic decelerators, 9808
Walasek, Zofia, relief, 10724
Walden, Harvey:
differential corrections applied to Vinti's accurate reference satellite orbit with inclusion of 3d zonal harmonic, 15564
orbital prediction and differential correction using Vinti's spherokial theory for artificial satellites, 8482
Waldman, Saul:
income-loss protection against short-term sickness, 1948-65, 2866
OASDHI retirement benefits, prices, and wages, 1966 experience, 8690
Waldron, Howard H., debris flow and erosion control problems caused by ash eruptions of Irazu Volcano, Costa Rica, 16686
Wales, C. P., changing discharge capacity of silver oxide electrode by charging with interrupted current, 9998
Wales, west coast, sailing directions, change, 8570
Walker, R. L., Jr., micrometer measures of 256 double stars, 11628
Walker, Robert H., establishing business in Belgium, 4435
Walker, T. C., feasibility, etc., unguided solid fuel rocket vehicle with solar orbit, earth probe, and re-entry mission capabilities, 12853
Walking, more hiking space, 7292
Walkotten, W. J., elevation effects on rainfall near Hollis, Alaska, 16655
Wall, Brian R., forest industries of eastern Washington, 8123
Walla Walla, Wash., fog dispersal experiments using propane, 11984
Walla Walla project:
construction of Touchet division—
hearing, 13879
report, 15115
Wallace, Richard A., polymer structure and ionic transport of polystyrenesulfonate model membranes, 9592
Wallace, Robert A., address, Oct. 24, 1967, 18244
Wallace, Roger, proceedings of symposium on biological interpretation of dose from accelerator-produced radiation, 15960
Wallace, Sarah L., quarterly Journal of Library of Congress, 3795
Wallace, Idaho, Galena mine, stress ellipsoid determination in rock-burst-prone area, 14351
Waller, Roger M.:
effects of Mar. 1964 Alaska earthquake on hydrology of—
Anchorage area, 1123
south-central Alaska, 1122
Walling, Faulkner B., water requirements of iron and steel industry, 12617
Walnuts:
and related species, annotated bibliography, 8108
black—
planting for timber, 32
timber resources and industries, 8121
chemical weed control in 2 year old planting, 14098
Walpole, Norman C., area handbook for Saudi Arabia, 5783
Walsh, Don, lecture, Feb. 17, 1965, 1602
Walsh, Robert M., talk, June 24, 1966, 12460
Walsh-Healey public contracts act, see Government contracts.
Walter Reed Army Medical Center:
military construction, authorization—
law, 458
report, 919
Walters, Jack G.:
chloroform extractions of coals and chars, 12826

INDEX 1967

- Walters, Jack G.—Continued
yields and analyses of tars and light oils from carbonization of U.S. coals, 16850
- Walters, Roger E., improved methods, techniques, and equipment for cleaning eggs, 4122
- Walther Herwig (research vessel):
West German fishery research vessel, 17772
- Walton, Paul T., oil and gas lease, reinstatement, 10740
- Walton, T. R., influence of fire-retardant undercoat on burning characteristics of combustible topcoat, 15056
- Walton, William C., Jr., procedure for computing motion of lunar-landing vehicle during landing impact, 18043
- Wang, James Ting-shun, on differential equations of axisymmetric vibration of paraboloidal shells of revolution, 17946
- Wang, Kung-Lee, interindustry structure of U.S. mining industries, 11356
- Wang, R., mineral industry of mainland China, 5115
- Wanhainen, John P., acoustic liners to suppress screech in hydrogen-oxygen rockets, 6870
- War:
assistance to enemies of U.S., in time of undeclared war, make punishable, reports, 19618, 12263
control of local conflict, design study, 15924
sinews, Army logistics 1775-1953, 1397
- Vietnam—
assistance to enemies of U.S., in time of undeclared war, make punishable, reports, 2017, 2019
Hungarian journalist reports, 4988
war hazards compensation act, regulations governing administration, 4726
war or peace in Middle East, study mission report, 10837
- War claims, *see* Claims.
- War of 1812, service records, pamphlet to accompany microcopy, Mississippi Territory, volunteers, 18070
- War on hunger, monthly news report, 8229
- Ward, Chester L.:
body volume of adult men, 14780
scuba diving, biologic and physical aspects, 11953
- Ward, Cordella T.:
major collective bargaining agreement expirations, 16824
wage calendar for 1967, outlook, etc., 5081
- Ward, Helen L., radioisotopes in biological sciences, annotated bibliography, 10304
- Ward, John F., exploratory flight investigation and analysis of structural loads encountered by helicopter hingeless rotor system, 1487
- Ward, Ray, background material on economy in Government, 9042
- Ward, Robert D., relief, 768
- Warehouse examiners examination announcement, amdt., 202
- Warehouses:
commercial service plan, Defense Dept., general merchandise and refrigerated storage, 15182
cotton, fire prevention program, 13237
grocery, use of adhesive labels for price-marking cases, 10155
refrigerated, directory, 5559
- Warfare, *see* Air warfare—Chemical warfare—Guerrilla warfare—Submarine warfare—War.
- Wargo, M. J., human operator response speed, frequency, and flexibility, 16904
- Warm air furnaces, *see* Furnaces.
- Warner, Dianne, beautiful junk, 17709
- Warner, Robert E., mechanism of deuterium breakup by 42-Mev alpha particles, 18032
- Warning systems:
emergency broadcast system, basic plan, 14016, 17450
- Warning systems—Continued
NAWAS, national warning system operations manual, 5914
outdoor, principles of sound and their application, 5915
programmed orientation to civil defense, 13431
security system monitors up to 15 remote areas simultaneously, 2665
seismic sea wave, reporting procedures for tide observers, 4412
- Warnke, Paul C., nomination, hearing, 15148
- Warrant officers, *see* Coast Guard Reserve.
- Warren, Bruce H., determination of inflight biochemical responses utilizing parotid fluid collection technique, 4187
- Warren, Doris E., relief of children, 13575
- Warren, Ohio, area wage survey, 8308
- Warren County, Tenn., soil survey report, 17208
- Warrior River, Holt Lock and Dam, spillway and navigation conditions, hydraulic model investigation, 4744
- Warsaw, Poland, East of the Elbe, study mission, report, 6104
- Warships:
loan to Brazil, agreements, 15788, 15798
loans, extension, etc.—
hearing, 7737
report, 10555
loans to friendly foreign countries, authorize extension, reports, 2025, 2101, 16271
naval vessels, antibacteriological defense and decontamination, USSR study, 8248
structures behaviour, survey of recent British work, 5488
- Warwick, R.I., area wage survey, 14290
- Washers (metal, etc.):
Federal Item Identification guide, 16463
- Washichek, Jack N.:
water supply outlook and Federal-State-private cooperative snow surveys for—
Colorado and New Mexico, 4045
early season snow survey for Colorado, 5519
special snow report for Colorado, 15750
- Washington, George:
brief biography, 14555
farewell address to people of U.S., text, 5976
print additional copies, report, 2018
5-cent commemorative postage stamp (poster), 18138
- Washington, Sylvia H., bibliography, Labor management relations act, 1947, as amended by Labor-management reporting and disclosure act, 11599
- Washington, D.C., *see* Capital of United States—District of Columbia.
- Washington Channel:
bridge to East Potomac Park, with visitor facilities, construct, hearings, 750
waterfront priority holders, amend act, reports, 895, 7700
- Washington Metropolitan Area Transit Authority:
compact, approval—
hearing, 2132
law, 478
report, 654
- Washington Monument, general information, 14555
- Washington State:
Blue Mountains, defect estimation for grand fir, Engelmann spruce, Douglas-fir, and western larch, 2289
census of agriculture, 1964, State and county statistics, 13411
census of mineral industries, 1963, area statistics, 5546
climatological data, 3096
coast pilot supplement, 5944
county business patterns, 1870, 13383
eastern, forest industries, 8123
electric rate book, 2253

Washington State—Continued
 Grays Harbor basin, Lincoln Creek formation, 12603
 health services grants made by PHS, financial administration, GAO review, 14160
 insect outbreaks, 2291, 17797
 low temperature reaction zones and alpine ultramafic rocks, 17817
 mineral industry, minerals, yearbook chapter, 2565
 national wildlife refuges of coast, 9518
 precipitation data, hourly, 3401
 public lands, use of income for schools, etc.—
 hearing, 9323
 law, 12177
 reports, 10733, 12262
 volcanic hazards of Mount Rainier, 9562
 water supply outlook and snow surveys, 4051
 western, labor requirements in thinning Douglas-fir and western hemlock, 4837
 Washington Technical Institute:
 establish—
 law, 495
 report, 693
 Washita National Wildlife Refuge, general information, 17782
 Washita River Basin project, Foss Reservoir repayment contract, amend, hearing, 15160
 Wason, James R., Federal legislation to end strikes, documentary history, 10861
 Wasps:
 Tiphia, new species from West Indies, 14540
 trap-nesting, life histories, etc., 8635
 Wasson, James A., secondary recovery of oil by waterflooding, Mitchell and Berea sands, Lower Newport field, Newport Township, Ohio, 14361
 Waste disposal, *see* Radioactive waste disposal—Sewage—Waste products.
 Waste products:
 brines from desalination plants, utilization, feasibility study, 14196-197
 cotton-ginning wastes, control and disposal, symposium, 7063
 cotton mill waste, marketing and utilization, 9390
 law regarding deposition of industrial waste solids into navigable waters, need for improving procedures to ensure compliance, Engineers Corps, Army, GAO report, 4898
 municipal waste disposal, air pollution aspects of tepee burners used, 1572
 pollution, treatment works, construction assistance, text, 6340
 solid waste disposal—
 laws, compilation, 4547
 summaries of research and training grants, 10063
 solid wastes program facts, 13095
 waste waters, removing organic contaminants, use of coal and modified coals as adsorbents, 2588
 watercraft, wastes from, report of Interior Dept. to Congress, 16349
 print as Senate document, report, 15141
 see also Radioactive substances—Refuse.
 Watches, *see* Clocks and watches.
 Water:
 A-B-seas of desalting, 4912
 acid mine water reverse osmosis test at Kittanning, Pa., 4915
 ages of plutonium-beryllium neutrons in tungsten-water, media, 1502
 algal growth aqueous factors other than nitrogen and phosphorous, selected biological references, 6338
 are we running out of water? 6396
 artesian, in Tertiary limestone in southeastern States, 6399
 atmospheric water resources program, 5480

Water—Continued
 behavior in various states, 15333
 boundary waters, Colorado River, loan, agreement with Mexico, 2914
 brackish, one mgd reverse osmosis plant, spiral module concept, parametric study, 9590
 brackish water conversion demonstration plant—
 Roswell, N. Mex., report, 16718
 Webster, S. Dak., annual report, 15327
 brackish well water reverse osmosis tests at Midland, Fort Stockton, and Kermit, Tex., 11217
 chemistry of aluminum in natural water (series), 15313
 civil defense aspects of waterworks operations, 4382
 Colorado—
 early season snow report, 5519
 special snow report, 15750
 Columbia River basin—
 discharge at gaging stations, etc., 3907
 storage in major power reservoirs, monthly report, 3907
 column probe, ultrasonic, speeds up testing of welds, 5225
 conservation—
 abstracts of material published, 8806
 conservation and full utilization, 11769
 conservation around world, 14653
 research in northeastern States, 38
 continuity of water substance, cloud formation, etc., 15231
 corrosion of aluminum, 17938
 deep water isotopic current analyzers, 13328
 desalination, 1st international symposium, proceedings, 9587, 11214-215
 desalting and energy development, etc., policy considerations, 15969
 determination of phenoxo acid herbicides by electron-capture and microcoulometric gas chromatography, 15312
 differential energy and angle spectra for Cs-137 gamma rays, 13326
 discharge measurement of streams by indirect method—
 at width contractions, 14176
 techniques, 11184
 discharge measurements at dams by indirect method, techniques, 9576
 droplets, improved method of determining spread factor for pesticide spray coverage, 10149
 dynamics of water rejection from hydrogen-oxygen fuel cell to hydrogen stream, 18031
 electric pumps on farm, 10176
 electrolysis cell for orbital test, 2607
 evaporation from soil, effect of sample size and environmental conditions, 10
 excretion and renal hemodynamics during lower body negative, 14770
 Federal grants for clean water, 11069
 fluctuations in rate of discharge of Clear Lake Springs, Millard County, Utah, causes, 12618
 fresh, productivity complexes, bases for compiling biological program, USSR study, 5008
 geochemistry of water (series), 11186
 ground water—
 Air Force Academy site, Colo., 11179
 American Falls Reservoir vicinity, 17832
 artificial recharge (series), 1128, 16700
 Big Sandy Creek Valley, Lincoln, Cheyenne, and Kiowa Counties, Colo., resources, 11191
 Bloomington-Colton area, patterns of subsurface flow, 1118
 Burnt River Valley area, Oreg., reconnaissance, 14182
 chemical quality, 4893

INDEX 1967

Water—Continued

ground water—continued
 High Plains of Colorado, development, 4893
 Jicarilla Apache Indian Reservation, resources of southern part and adjacent areas, 17829
 Kern River alluvial-fan area, geology and hydrology, 1116
 Laramie County, Wyo., resources, 8179
 levels in United States, 1960-64, South-Central States, 16702
 Lytle Creek-San Sevaline area, studies proposed, progress report, 1125
 Mississippi Test Facility, Hancock County, Miss., development, 8183
 Pascagoula River basin, Miss. and Ala., 11190
 Piedmont and Blue Ridge provinces in southeastern States, 9566
 Pinal County, Ariz., western, salinity, 1131
 Portage County, Ohio, resources, 11172
 Salar de Atacama, Antofagasta Province, Chile, resources, 11164
 Savannah River and vicinity for atomic energy plant, 16705
 Upper Santa Ana Valley, Calif., studies proposed, progress report, 1125
 upper Sevier River basin, Utah, conditions, 14180
 Ute Mountain Indian Reservation, Colo. and N. Mex., 6409
 human water exchange in space suits and capsules, 12863
 hydrologic cycle, 16535
 increasing water yield from atmospheric sources through technology development plan, 5480
 Indian Ocean, measurement of propagation velocity of elastic oscillations in surface layer, 36th cruise of USSR experimental ship Vityaz, 15353
 intensity measurements of absorption bands, 1550
 keep your drinking water safe, 5443
 loans for development of water supply systems, etc., questions and answers, 1431
 management, citizen's stake (remarks), 13219
 masses and density stratification western North Atlantic Ocean, atlas, 11629
 masses in Indian Ocean, variability, 11630
 minerals yearbook chapter, 1417
 Mississippi River Delta, monitoring agricultural pesticide residues, preliminary report of studies, 4086
 municipal water supplies—
 mineral content, economic effects, 14199
 saline and conventional water sources in Texas, procedures and methods for calculating costs, 12645
 natural, quantitative determination of tritium, 1130
 Nevada, fall summary, 17205
 new era for America's waters, 6342
 occurrence of selected minor elements in waters of California, 11186
 official Coast Guard recreational boating guide, 219, 4419
 organic substances in water (series), 15312
 Pacific Northwest—
 annual peak discharge at selected gaging stations, 16680
 current discharge at selected stations, 3907
 month-end storage in major reservoirs, 3907
 new reports by Geological Survey, 11170
 water resources summary—
 annual, 2362, 17822
 monthly, 3670
 water resources weekly runoff report, 3671
 Park Range atmospheric water resources program, phase 1, 11774

Water—Continued

Parkfield-Cholame, Calif., earthquakes of June-Aug. 1966, resources aspects, 9574
 peak discharge measurement by slope-area method, techniques, 11185
 performance of hubless pump inducer, 6860
 pressures and accelerations encountered during landings of Apollo spacecraft, dynamic model investigation, 16970
 quality, standards for interstate waters, guidelines for establishing, 6341
 radiochemical analysis of water (series), 1130, 6410
 radon containing, and their therapeutic uses, USSR study, 8241
 requirements and uses—
 Montana mineral industries, 2539
 Wyoming mineral industries, 12796
 requirements of—
 iron and steel industry, 12617
 normal adults residing at 4300 meters for 28 days, 14806
 selected industries (series), 12617
 research, selected summaries, 2273, 11070, 17766
 residential use, study, 11206
 resource development proposals, Interior Dept. to investigate feasibility, reports, 2015, 12362
 resource projects under jurisdiction of Army Dept., change in name—
 law, 12181
 reports, 9297, 13630
 resources—
 Alaska, print additional copies, report, 13651
 and their conservation in Hungary, 12705
 California, 1126-27, 2124, 12616
 conservation, code of Federal regulations, 11035
 cooperative research and training, report, 6438
 developed, protected, and geared for sustained use (remarks), 51
 development proposals, Interior Dept. to investigate feasibility, report, 16240
 French Prairie area, northern Willamette Valley, Oreg., 14179
 Grand River basin, Mich.—
 economic base study, 1024
 study, information booklets, 7927-28
 Ipswich River basin, Mass., 6411
 Jackson and Independence Counties, Ark., 14181
 Marquette Iron Range area, 14183
 Michigan, southeastern river basins, study, information bulletin, 7929
 Missouri, and development projects, 15055
 print as Senate document, report, 9276
 national problems and programs, comprehensive review—
 hearings, 9162
 reports, 4613, 12278, 13661
 Pulaski and Saline Counties, Ark., 8181
 research, 1968 Federal program, 11781
 soil conservation, devoted to wise use of land and water resources (periodical), 3883
 Swatara Creek basin of southeastern Pennsylvania, evaluation of hydrologic system, 16703
 technical publications, 7102, 10073, 11774-776, 17181
 Tennessee Valley, nature's constant gift, report, 2945
 resources projects, Federal reimbursement policy, study—
 departmental edition, 6209
 document edition, 6057
 resources research catalog, 6452
 resources thesaurus, vocabulary for indexing and retrieving literature, 2398

Water—Continued

safety tips in, on, and around water, 15709
 saline—
 desalination by electrosorption and desorption, 6445
 mass transfer properties, 2393
 nuclear energy for desalting, bibliography, 12013
 saline conversion—
 appropriations, expand program, etc.—hearing, 9322
 law, 12172
 reports, 10561, 10753
 conceptual design of desalination plant, 2396, 8216, 15330
 demineralization by environmentally modulated adsorption, 8212
 demonstration plant, Freeport, Tex., annual report, 17848
 engineering data book, supplement, 2397
 foam fractionation, 12642
 freezing, research, 9593
 nucleation and growth of ice crystals, 6442
 report, 11216
 thermophysical properties of saline water systems, 12643
 USSR, technical publications, translations, 13813
 velocity and concentration profiles in reverse osmosis systems, 11218
 waste heat used for production of fresh water, 6450
 saline water research and development progress reports, 1140, 2393-96, 4915, 6440-51, 8211-16, 9588-94, 11217-218, 12641-645, 14196-200, 15326-333, 16718, 17848-849
 science and saving water and soil, 15842
 strategy for clean water (remarks), 16719
 strontium-90 determination, 6410
 supply—
 Alaska, northwestern, Project Chariot, potential effects, 2369
 Colorado River, watershed conditions affecting, 3922
 western United States, fall, summary, 17206
 supply and treatment, Army and Air Force installations, technical manual, 109
 supply outlook—
 Arizona, 4044
 Colorado and New Mexico, 4045
 Idaho, 4046
 Montana, 4047, 18217
 Nevada, 4048
 Oregon, 4049
 Utah, 4050
 Washington State, 4051
 western United States, including Columbia River drainage in Canada, 4052
 surface water—
 and related climate features, Shail Sūsah area, Tunisia, 11189
 chemical quality, in Allegheny River basin, Pa. and N.Y., 8180
 chemical quality reconnaissance, Neches River basin, Tex., 17830
 chlorinated hydrocarbon pesticides, identification and measurement, 4800
 controlling on level fields, 5642
 hydrology of California coastal basins, between San Francisco Bay and Eel River, 15315
 quality—
 United States, 2375, 8184, 11192, 17834
 western States, 1963, for irrigation, 8185
 techniques of water-resources investigations, 9576, 11184-185, 14176
 temperature data, correlation and analysis for Oregon streams, 8177
 trace contaminants, analytical technique for characterizing, 15532
 trace organic materials, methods for determination, 6451

Water—Continued

transmission of light through plane water surface and its return by submerged retroreflector, 13031
 underwater sports in USSR, 6552
 use in manufacturing, 1963 census of manufacturers, 4279
 use in mineral industries, 1963 census of mineral industries, 5848
 water and sewer facilities grant program, HUD consumer bulletin, 17838
 water and wastewater facilities 1955-80, regional construction requirements, 17417
 water for peace—
 international conference, organize and hold in U.S., 1967—
 law, 503
 reports, 700, 2092
 representative list of R & D reports available, 10439, 14872
 water-resources reports, announcement, 3030
 water resources review (periodical), 4043
 water supply of Indian reservations (series), 6409, 17829
 water supply papers, 1128-33, 2374-76, 4892-95, 6409-12, 8177-85, 11186-192, 12617-618, 14177-184, 15312-315, 16700-705, 17829-834
 water-vapor electrolysis cell with phosphoric acid electrolyte, 12858
 yield, increasing in Northeast by management of forested watersheds, 14136
 see also Heavy water—Hydrogeology—
 Ice—Sea water—also headings beginning water.
 Water birds :
 aerial surveys, 1961-66, factors influencing waterfowl counts, 15268
 Federal baiting regulations, questions and answers, 15258
 hunting, possession, transportation, importation, Federal regulations, 1080, 16623
 Alaska, 14061
 migratory waterfowl—
 conservation—
 hearing, 10665
 report, 12265
 regulations, 1967-68, hearing, 16336
 pelagic distribution of seabirds in western Indian Ocean, 14534
 seabirds—
 numerical coding, 14536
 tropical Atlantic Ocean, identification manual, 2752
 status report, 6357
 Water carriers :
 class A and B, revenue and traffic, quarterly, 3831
 mixing rule exemption, modernize certain restrictions upon application and scope—
 hearings, 16399
 report, 16374
 operations, exemptions from certain provisions of shipping act, 1916—
 hearings, 4352
 law, 482
 rate suspension, accounting at expiration, hearings, 16337
 refunding portion of freight charges, hearings, 16337
 transport statistics, 4029, 16729
 Water-closet bowls, see Toilet bowls.
 Water flooding, see Petroleum.
 Water fowl, see Water birds.
 Water heaters, liquid, classification definitions, 18122
 Water-landing characteristics of 1/10-scale model of winged missile, 9872
 Water measurements, manual pertaining to measurement of water for irrigation projects, 11776

INDEX 1967

Water meters, use of records to estimate recreation visits and use on developed sites, 12579

Water pollution:

- biological field investigative data for water pollution surveys, 1073
- building for clean water, progress report, 8010
- central and northern California, hearing, 15035
- clean water for America, career opportunities, 8012
- clean water plan, Greenspan grants, general information, 5672
- clean water restoration act of 1966, pollution control and abatement in selected river basins—
 - law, 12156
 - text, 6340
- Columbia Basin and Pacific Coast States, inventory of research, 15254
- control—
 - directory, 17767
 - fresh and marine waters, selected biological references, 8011
 - Great Lakes-Illinois River basins project, Lake Ontario program, 9501
 - Great Lakes region, hearing, 738
 - Lake Michigan basin comprehensive plan—
 - Green Bay area, Mich. and Wis., 14050
 - Milwaukee area, Wis., 14051
 - Lake Ontario program, 9501
 - manpower and training needs, 17615
 - print as Senate document, report, 16362
 - program, 1967 review, hearings, 9168
 - research and training grants—
 - awards, 2274
 - publications and reports, 1965 index, 11071
 - control act, amend—
 - hearings, 16435
 - law, 12156
 - text, 6340
 - control and abatement—
 - message from the President, 5992
 - remarks, 5446
 - save America's small lakes, report, 14986
 - control of oil discharges in navigable waters, amend act, hearings, 16435
 - control program, 1967 review, hearings, print additional copies, report, 13656
 - creek and the city, urban pressure on natural stream, Rock Creek Park and Washington, D.C., 4913
 - danger of underestimating impurities in water, Rumanian study, 15371
 - environmental pollution, challenge to science and technology, report, 2057
 - Federal grants for clean water, 11069
 - fish kills, annual report, 17765
 - interstate and intrastate waters, of upper Mississippi River and its tributaries, Minn. and Wis., conference, proceedings, 14052, 15253
 - intrastate waters—
 - Chattahoochee River and tributaries, conference, proceedings, 2271
 - Grand Calumet River, Little Calumet River, Calumet River, Wolf Lake, Lake Michigan and tributaries, progress evaluation meeting, 14053
 - Lake Tahoe and tributaries, conference proceedings, 9500
 - Lake Erie and its tributaries—
 - conference, proceedings, 16609
 - 3d meeting, proceedings, 6344
 - laws, compilation, 4547
 - navigable waters of Moriches Bay and eastern section of Great South Bay and their tributaries, conference proceedings, 6339
 - pollution control costs in mine drainage management, handbook, 12539

Water pollution—Continued

- seas, by oil—
 - international control, report, 16234
 - international convention for prevention, amendments—
 - implementing, hearings, 745
 - text, 5542
 - south Lake Tahoe, Calif., hearings, 2056
 - strategy for clean water (remarks), 16719
 - waste waters, removing organic contaminants, use of coal and modified coals as adsorbents, 2588
 - wastes from watercraft, report of Interior Dept. to Congress, 16349
 - print as Senate document, report, 15141
 - what you can do about water pollution, 17768
- Water Pollution Control Administration, Federal, *see* Federal Water Pollution Control Administration.
- Water power, publications, price list, 8623
- Water purification:
 - equipment, Federal item identification guides for supply cataloging, supplements, 3288
 - fly ash as coagulant aid in water treatment, 2573
 - rigging CW-BW water pretreatment decontamination set, airdrop, Army technical manual, 10280
- Water Resources Council:
 - appropriations, 1967, law, 403
 - appropriations, 1968—
 - hearings, 12287, 16393
 - report, 13678
 - press releases, 3767
 - Task Force on Institutional Arrangements for River Basin Management, report, 17292
- Water Resources Division:
 - California district, activities, 1106-9
 - reports for California, lists, 1126
- Water Resources Research Office:
 - appropriations, 1968, hearings, 7734
 - programs, briefing session, hearings, 10655
 - Water supply, *see* Water.
- Water systems:
 - financial assistance to small towns and rural groups in Oklahoma, questions and answers, 7945
 - water and wastewater utilities, capital expenditures, 1964 distribution, 4260
 - water treatment, selected biological references, 8011
- Water vapor:
 - atmospheric, aloft over Great Lakes basin, total distribution, 16833
 - effect of optical radiations and water vapor on trapping spectrum of cadmium sulfide, 14455
 - observations at low, middle, and high latitudes, 5362
 - profile in Martian atmosphere, flyby measurement, 15569
- Waterborne commerce, *see* Commerce.
- Waterborne foreign trade, trade area by coastal district, 3356
- Waterbury, Conn., area wage survey, 11325
- Watercraft, *see* Boats—Ships.
- Waterflooding, *see* Petroleum.
- Waterfowl, *see* Water birds.
- Waterfront operational facilities:
 - Navy design manual, changes, 2765
 - security, Federal regulations, 10448
- Waterhouse, Robert, reevaluation of Rammsonde hardness equation, 1755
- Waterline erosion control essential to stream-bank rehabilitation, 14099
- Waterloo, Iowa:
 - area wage survey, 6608
 - population, special census, 8950
- Watermelons:
 - for garden, 4118
 - heavier loading in rail cars and piggyback trailers, damage and cost reduction study, 10154

Waterproofers, safe work guide, 11806
Waters, Roy F., extraction of germanium and gallium from coal fly ash and phosphorus furnace flue dust, 9789

Watersheds:
central Colorado, high mountain, sediment yields, 2382
flood prevention, 11 authorized, 14650
forested, increasing water yield in North-east by management, 14136
loans available from Farmers Home Administration, questions and answers, 4129
planning, SCS national engineering hand-book, 10087
projects, miscellaneous, hearings, 711, 12427
small tree-covered and fern-covered and burned in Hawaii, rainfall and stream-flow, 8115
the watershed, a new look at war on poverty, 10915
see also names of rivers, etc.

Waterways Experiment Station:
miscellaneous papers, 4742, 15229, 17738
publications—
available for purchase, 13981
list, 13978

technical reports, 1030, 2220-21, 4743-45, 6210-16, 7930-34, 9424, 10960-962, 13985-988, 16526-529, 17737

Watkins, Phillip L.:
digital magnetic tape system for recording radar data, 17096
Randle Cliff radar digital range-measure-ment instrument, 18114

Watson, Bruce G., soil survey of Lafayette County, Va., 1610

Watson, Charles W., jr., relief, 13590
Watson, George E., seabirds of tropical Atlantic Ocean, 2752

Watson, Gordon K., effect of ductile cladding on bend transition temperature of wrought tungsten, 17008

Watson, Velvin R., numerical calculations for characteristics of gas flowing axially through constricted arc, 12955

Watt, Lois B.:
education of disadvantaged children, bibliog-raphy, 4709
Educational Materials Center, 4710
family life and sex education, bibliography, 6184

Waubay National Wildlife Refuge, birds, list, 15263

Waugb, Frederick V.:
agricultural policy, review of programs and needs, 17124

graphic analysis, applications in agricul-tural economics, 4099

Wave functions:
spheroidal—
oblate radial functions of 1st and 2d type, tables, 10002, 17087

prolate radial functions of 1st and 2d type, tables, 10010

Wave generators, multiphase supplies from signal conversion of direct current, 17079

Waveguides:
asymmetric waves in circular waveguide with open end, general theory, 11566
diode-iris controlled waveguide slot radi-ators, feasibility study, 9812

earth-ionosphere waveguide channel, prop-agation of long and superlong radio waves, USSR excerpt, 17873

optical, and components, development, 15508

parallel-plate, aperture reflection coeffi-cient by wedge diffraction analysis, 14382

rectangular, dielectric covers, effects over cross slots, 18027

Wavelengths:
X-ray, 17036

Wavelengths—Continued

X-ray source uses interchangeable target anodes, 14124
see also Spectra.

Waves:

asymmetric, in circular waveguide with open end, general theory, 11566

correlation of littoral transport with wave energy along shores of New York and New Jersey, 7925, 10054

inversion, effect upon sonic-boom propaga-tion, 9427

longshore current data, compilation, 10952
magnitude of nonlinearities in collisionless magnetoplasma, 5253

neutron wave propagation techniques, sym-posium, proceedings, 12003

ocean—
instrumentation of nearshore environ-ment, by multipurpose data acqui-sition system, 16322

origin and dynamics, USSR study, 12674

propagation—
finite amplitude in thermoviscous media, 1434

millimeter and submillimeter, 15511
rock movement in large-scale tests of rip-rap stability under wave action, 16250

seismic sea wave warning system, wave reporting procedures for tide observers, 4412

stress and wave patterns in soils subjected to dynamic loads, 10255

wave-powered device for moving sand, fea-sibility study, 13975

wave record program at CERC, 10951
see also—Electric waves—Pressure waves

—Radio waves—Shock waves—Sound—
Sound waves.

Waxes, Federal item identification guides for supply cataloging, supplements, 3290

Ways and Means Committee, House:
calendar, 3486
committee prints, 2115, 4565, 6046, 6048, 15053, 16346

digest of testimony, etc., on interest equal-ization tax extension act, 9176

funds, report, 7726
hearings, 6047, 6049, 7763-64, 10684-685, 17614

legislative history—
H.R. 6950, restoration of investment credit and allowance of accelerated depreciation in case of certain real property, 18719

H.R. 8363, revenue act of 1964, 756
H.R. 10650, revenue act of 1962, 4564, 7760

H.R. 11256, tax lien act, 757
H.R. 11970, 87th Congress, trade expan-sion act of 1962, Public law 794, 7761

H.R. 13103, 89th Congress, foreign in-vestors tax act of 1966, 7762

H.R. 17607, suspension of investment credit and allowance of accelerated de-preciation in case of certain real prop-erty, 2064

P.L. 90-3 and P.L. 90-39, public debt ceiling, 15051

P.L. 90-59 and P.L. 89-243, interest equalization tax extension acts, 15052

reports, 617-618, 659, 2022-24, 2027-25, 6003, 7647-53, 7670, 7685, 7690, 7692-94, 7696-99, 7713, 7730, 9088-92, 9099-9100, 10621, 12273, 14953, 16284

WB/BC series, 16539
Wealth, personal wealth, 1962 income sta-tistics, 15386

Weapons:
chart system simplifies identification of complex design assemblies, 1458
effects, thermal radiation, produces chorio-retinal lesions, study, 10231

Federal item identification guides for sup-ply cataloging, supplements, 3293

INDEX 1967

Weapons—Continued

- individual, ROTC manual, 1766
- nuclear—
 - AEC authorizing legislation, 1968, hearings, 10491
 - Chinese Communist progress, impact on U.S. national security, report, 13542
 - development in U.S. and Soviet Union, digest, 7746
 - effects—
 - programmed orientation to civil defense, 13429
 - self-teaching materials, 13427
 - non-proliferation treaty, why? 15926
 - systems—
 - Project Hindsight, 1st interim report, summary, 7857
 - rigging M28 and M29, Army technical manual, change, 15952
- Weapons carriers, 1/2 ton, rigging for air-drop, Army technical manual, 10281
- Wear, John F.:
 - aerial photographic techniques for estimating damage by insects in western forests, 14078
 - sampling tree tops by helicopter, special pole pruner cuts branchlets, 11123
- Wear, see Friction.
- Weather:
 - aviation weather procedures handbook, changes, 4188, 16548
 - control, and the hand of man, 13993
 - daily weather and river bulletin—
 - Albuquerque, N. Mex. area, 3184
 - Houston, Tex. area, 3185
 - New Orleans, La., area, 3186
 - effect on sound transmission from explosive shots, 9773
 - engineering data for heating and air conditioning design, etc., Army, Navy, and Air Force manual, 11947
 - ESSA operational satellite system, 1033
 - Government employees absent because of dangerous conditions, to be excused without loss of pay, amend U.S. Code, hearing, 9329
 - Luquillo Mountains, P.R., 1958-62 records, 14130
 - maps—
 - daily weather map, 3187
 - synoptic, Northern Hemisphere, 3181
 - mariners weather log (periodical), 3541
 - naval weather service computer products manual, 15618
 - radio aids—
 - Atlantic and Mediterranean area, 1540, 9975, 14581
 - Pacific and Indian Oceans area, 2772, 5573, 11648, 17076
 - review, monthly, 3583
 - service A schedules, ATS handbook, changes, 5717, 11971
 - service C schedules, 1746
 - changes, 11972, 16561
 - service for merchant shipping, 7230
 - service O international schedule, ATS handbook, 1745
 - change, 13275
 - severe conditions, administrative leave for Federal employees, hearing, 748
 - severe weather flying, physiological responses of pilots, 5804
 - weather and crop bulletin (periodical), 4060
 - weather radar manual—
 - fundamentals and applications, 17294
 - national network, observing and reporting procedures, 17293
 - world records, 1951-60, Asia, 9435
 - see also Meteorology.
- Weather Bureau:
 - circular, 5592
 - ESSA technical memorandum, WBTM TDL series, 9428-29, 12479
 - ESSA technical report, WB series, 10968
 - operations, semiannual report, 14722
 - technical note, 2972

Weather Bureau—Continued

- WBAN manual of surface observations, 5592
- Weather control:
 - modification—
 - annual report, 13013
 - progress, hearing, 9321
 - recommended national program, 9450
 - Soviet Union, 1944-66, bibliography, 17903
- Weather forecasts:
 - Air Force weather forecaster proficiency, test correlates, 8863
 - average monthly weather outlook (periodical), 3051
 - coastal warning facilities charts—
 - Canadian border to Eureka, Calif. and Alaska, 14717
 - Cape Hatteras, N.C. to Brunswick, Ga., 14718
 - eastern Florida, 8790
 - Eastport, Maine to Montauk Point, N.Y., 14719
 - Eureka to Point Conception, Calif., 11901
 - Hawaiian Islands, 11902
 - Manasquan, N.J. to Cape Hatteras, N.C., Chesapeake Bay, 14720
 - Montauk Point, N.Y. to Manasquan, N.J., 14721
 - Morgan City, La. to Brownsville, Tex., 11903
 - Point Conception, Calif. to Mexican border, 11904
 - Puerto Rico and Virgin Islands, 11905
 - fog forecasting, use of atmospheric-electricity recordings, 8590
 - human processing of information, investigation, 8862
 - numerical methods, USSR study, 1184
 - objective numerical prediction out to 6 days using primitive equation model, test case, 12479
 - severe-storm forecasting procedures of Military Weather Warning Center, analysis, notes, 17339
 - small craft, gale and whole gale warning facilities charts, 14723-724
 - United States precipitation, long-range forecast, supplement, 11791
 - weather radars & remote displays, Federal plan, 13232
- Weather modification, see Weather control.
- Weather Records Center, National, see National Weather Records Center.
- Weather satellites, see Satellites.
- Weather Service, National Agricultural, see National Agricultural Weather Service.
- Weather Service, National Fire, see National Fire-Weather Service.
- Weather stations:
 - cooperative meteorological program—
 - Cayman Islands, continuation, agreement with Great Britain, 7192
 - continuation, agreement with Dominican Republic, 8731
 - decadal census, Texas, 6228
 - index, 17077
 - North Atlantic Ocean Station Charlie, 10444
- Weathering, concrete and concreting materials, performance, investigation, 6214
- Weathering layouts in a small community, case studies, etc., 1360
- Weaver, George L-F., remarks, Mar. 10, 1967, 8283
- Weaver, Robert C.:
 - addresses, etc.—
 - Apr. 9, 1967, 9581
 - May 8, 1967, 11196
 - June 4, 1967, 11197
 - bibliography of published works, 11195
 - Weaving, automating wool looms, 1186
 - Weaving mills, textile industry, weaving, how to inspect chart, 9691

- Web belt load measuring instrument has excellent stability, 14436
- Webb, James E.:
addresses—
May 23, 1967, 17022
May 27, 1967, 18059
- Webb, Paul:
bio-thermal responses to varied work programs in men kept thermally neutral by water-cooled clothing, 8423
human water exchange in space suits and capsules, 12863
- Webbert, M. Virginia, basic data on economy of Thailand, 229
- Webbing, general repair, Army technical manual, 14801
- Weber, Dean, United States censuses of population and housing, quality control of field enumeration, 17443
- Weber Basin project, Willard Dam, technical record of design and construction, 8671
- Weber Delta, geology and hydrology of district, 6400
- Weber, S. Dak., brackish water conversion demonstration plant, annual report, 15327
- Wechsler, Alfred E., thermal conductivity probes for soils and insulations, 4201
- Wedel, Frances von, *see* Von Wedel, Frances
- Wedges, measures parallax separations on large-scale 70 mm. aerial photographs, 16659
- Weedfall, Robert O., climatological aspects of air pollution in West Virginia, 6219
- Weeds:
chemical control in 2-year old walnut planting, 14098
control, suggested guide, 13213
killing with herbicides, student or classroom science project, 4137
lawn, control with herbicides, 15854
noxious seed chart, 2138-39
range, chemical control, handbook, 4102
- Weekly:
Note.—For all publications which begin with the word "Weekly", *see* subject, or name of department, etc., issuing publication.
- Weeks, George E., buckling of pressurized toroidal ring under uniform external loading, 15570
- Weeks, W. F., understanding variations of physical properties of sea ice, 15931
- Weeks, *see* names of special weeks.
- Weertman, J.:
effect of basal water layer on dimensions of ice sheets, 4196
sliding on non-temperate glaciers, 7379
- Weevils:
boll weevils, cotton squares, efficiency of fall-type machine in destroying, 7242
pales weevil—
description, control, etc., 4821
technique for rearing, 9538
white pine, life history, control, etc., 17794
- Wegbreit, J., clutches and power-stop control, classification definitions, 18132
- Wegweiser für Amerika-reisende, 15814
- Wehrend, William R., Jr., minimum energy reaction wheel control for satellite scanning small celestial area, 9899
- Welberg, James A., parachutes designed for controllable gliding flight, 11512
- Weight, adult men, body volume, 14780
- Weightlessness:
astronaut capabilities to perform extra-vehicular functions in weightless conditions, 15507
dynamics of 2-phase liquid-gas weightless medium with aid of surface effects, control, 11562
effect on otoliths, temperature control of orbital otolith experiment, 12868
liquid outflow from cylindrical tanks, experimental investigation, 2720
- Weightlessness—Continued
liquid surface motion in response to lateral acceleration during weightlessness, 12966
liquids, frequency and viscous damping, experimental investigation, 15571
outflow termination, interfacial behavior, 8501
role of vestibular organs in exploration of space, 5191
sodium and water excretion and renal hemodynamics during lower body negative, 14770
- Weights and measures:
commercial, specifications, tolerances, and other technical requirements, replacement pages, 6914
standardization on national and international level important for all (address), 12126
units, definitions and tables of equivalents, 8941
see also Metric system.
- Weights and Measures, National Conference on, *see* National Conference on Weights and Measures.
- Weihaupt, John G., oceanography, study, guide, 12438
- Weil, Margaret L., *see* Loh, Che Yim.
- Well stain, *see* Stains and staining (microscopy).
- Welman Museum, paintings to be transferred in trust for, agreement, 7190
- Weinbrecht, Ruby Y., marketing information guide, annotated bibliography, 3544
- Weinstein, Leonard M., hypersonic performance of several basic and modified diamond-cross-section delta-wing configurations, 9884
- Weinstein, Sidney:
adaptation to visual and nonvisual arrangement, 5167
effects of sensory deprivation on sensory, perceptual, motor, cognitive, and physiological functions, 8419
- Weinstock, Herbert, limitations on inertial sensor testing produced by test platform vibrations, 1492
- Weintraub, Murray:
design of gas-motivated solids dispersion devices, 6687
incineration in cylindrical combustion chamber, 9763
- Weir, D. H., model of human operator response to step transitions in controlled element dynamics, 5172
- Wells, Milton L., projectile impact initiation of condensed explosives, 14343
- Weissbart, J., electrolytic dissociation of CO₂-H₂O using solid oxide electrolyte, 6715
- Weitzell, E. C., zoning, aid to community resource development, 17326
- Weitzman, Donald O., longitudinal study of acuity and phoria among submariners, 12791
- Weitzman, Stanley H., South American characid fishes of subtribe Nannostomina, 8537
- Welch, Richard L., five-year trend in price of pulpwood in Southeast, 15286
- Welcome aboard, USCGSS McArthur, CSS 30, 10970
- Welcome to Washington, 13010
- Weld, Betsy A., reports and maps of Geological Survey released only in open files, 9563, 15307
- Welded joints, *see* Joints.
- Welder shields, *see* Shields.
- Welders:
helmets, hand held shields, and helmet lenses, military standard, 9372
power arc welder touch-started with consumable electrode, 6803
standard arc, provide high amperage direct current source, 1448

INDEX 1967

Welding:

- aluminum fusion welds, continuous internal channels produced, 12909
- aluminum welds improved by bead removal, 8457
- AM 350 and AM 355 steels, 15552
- composite weld rod corrects individual filler weaknesses, 9862
- corrosion-resistant steel, controlled ferrite content improves weldability, 8475
- cross-wire welds, quality control criteria for acceptance testing, 5227
- electron beam welder X-rays its own welds, 14423
- embedment and other metallurgical and mechanical characteristics of cross-wire resistance welds, 2698
- equipment industry in Japan, 12031
- explosive, study to establish parameters and limitations, 17999
- fusion welding, workmanship standards, 14365
- graphite materials, USSR study, 15395
- Hastelloy-X, weld procedure produces quality welds for thick sections, 14364
- heat input rates effects on T-1 and T-1A steel welds, 12894
- machinery, etc., for ships of Navy, military standard, 2154
- operations, monitored by closed circuit TV system, 12893
- opposed arcs permit deep weld penetration with only 1 pass, 2644
- pipe welds, fixture facilitates helium leak testing, 12904
- portable machine head automatically controls arc, 15542
- portable spectrometer monitors inert gas shield in welding process, 16960
- position effect on porosity formation in aluminum alloy welds, 12903
- refractory metals by vapor deposition, 14432
- system maintains constant penetration during fusion process, 11443
- titanium alloys, salt water stress-corrosion cracking characteristics, 17091
- ultrasonic water column probe speeds up testing of welds, 5225
- welded steel penstocks, design, construction, etc., 11718
- Welding torches, see Blowtorches.
- Weldments, see Welding.
- Welfare, see Public assistance—Social work and problems.
- Welfare Administration:
 - practices in providing nursing home care, etc., for—
 - old-age assistance recipients in Cleveland, Ohio, area, GAO report, 8150
 - welfare recipients in California, GAO report, 2354
 - pricing methods used by various States in purchase of drugs under federally aided public assistance programs, GAO review, 9556
 - programs and services, facts, 7234
 - recovery of excess funds accumulated under insurance contract for medical care, GAO review, 8145
 - work registration under Federal-State aid to dependent children of unemployed parents in Ohio, GAO review, 11157
- Welfare funds:
 - Alabama, proposed cutoff, hearings, 6096
 - welfare and pension plans disclosure act—
 - administration, 1966, report of Secretary of Labor, 12764
 - amend with respect to filing of copies and making affidavits, hearing, 4631
 - questions and answers, 14278
 - reporting and bonding provisions, administration and enforcement, Labor-Management Services Administration, Labor Dept., GAO review, 8141

- Welfare in review (periodical), 4061
- 1966 statistical supplement, 5596
- Welfare work, see Public assistance—Social work and problems.
- Weiland Canal, lockage fees, agreement with Canada, 11872
- Wellner, Charles A., spiral grain, cause of pole twisting, 14129
- Wells, C. Sinclair, Jr., injection of drag-reducing fluid into turbulent pipe flow of Newtonian fluid, 14398
- Wells, Jean A.:
 - college women seven years after graduation, 7235
 - continuing education programs for women, 5607
- Wells, John D., geology of Eldorado Springs quadrangle, Boulder and Jefferson Counties, Colo., 11165
- Wells, Paul L., automatic system for analysis of time variant data, 4748
- Wells:
 - aquifer properties and well design for artificial-recharge site, 1128
 - brackish water reverse osmosis tests at Midland, Fort Stockton, and Kermit, Tex., 11217
 - classification definitions, 13045
 - Madera area, San Joaquin Valley, Calif., 12605
- Welsh, Edward C., address, May 5, 1966, 1516
- Welsh, Harold, Navy civil engineer, 3613
- Wen Shi Yu, see Yu Wen Shi.
- Wenger, Norman C., resonant frequencies of dielectric sphere immersed in collisional plasma, 12929
- Wengert, E. M., parameters for predicting maximum surface temperatures of wood in exterior exposures, 1096
- Wentz, William H., Jr., delta and double-delta wing flow fields at low speeds, 6724
- Wenzel, Guss E.:
 - amplifier drift tester, 8503
 - development of microminiature dc signal-conditioning amplifier, 14483
- Wert, Steven L., wedge measures parallax separations on large-scale 70 mm. aerial photographs, 16659
- Wesoky, Howard L., boundary-layer measurements in accelerated flows near Mach 1, 8497
- West, A. W., report on pollution in Lake Tahoe basin, Calif., Nev., 9500
- West, Francis J., Jr., small unit action in Vietnam, 8332
- West, Hugh L., wage chronology, Firestone Tire and Rubber Co. and B. F. Goodrich Co., Akron plants, 8301
- West, J. M.:
 - mineral industry of—
 - Burma, 2550
 - Indonesia, 6652
 - Malaysia and Singapore, 6658
 - North Korea, 1402
 - Philippines, 2562
 - Thailand, 8368
 - regional mineral industry review of Far East, 11367
- West, James A.:
 - mineral industry of—
 - Afghanistan, 6642
 - India, 8352
 - Kuwait, 2556, 8356
 - Kuwait-Saudi Arabia Neutral Zone, 5112
 - Lebanon, 5113
 - regional mineral industry review of—
 - Near East, 6672
 - South Asia, 8373
- West, Quentin M., paper, Feb. 16, 1966, 16496
- West (U.S.):
 - beet leafhopper, life history, host plants, etc., 5686
 - Far West, engineering and economic aspects of cotton gin operations, 12542

West (U.S.)—Continued

Federal exploration before 1880, exhibit of maps, surveys, etc., 8516
forests, aerial techniques for estimating damage by insects, 14078
fresh fruit and vegetable unloads in western cities by commodities, States, etc., 7831
irrigation, 1963, quality of surface water, 8185
Negro social and economic conditions, 15453
phosphate industry and its resources, evaluation, 11370-371
progress in range research in 17 western States, 6136
resource conservation and development project areas, baling wood shavings and sacking sawdust, economic potentials, 10920
skiing trends and opportunities in western States, 11133
trans-Mississippi West, historic places associated with mining, ranching, and farming frontiers, 13008
Twin Creek limestone (Jurassic) in western interior, 8168
water supply—
 fall summary, 17206
 outlook and snow surveys, 4052
western range and livestock monthly report, 4062
western rivers, rules of the road, 4421
wireworms on irrigated lands, control, etc., 10170
zinc deficiency of field and vegetable crops, 5640
West Fork River:
 and tributaries, W. Va., engineer report—
 departmental edition, 2222
 document edition, 2069
West Germany, *see* Germany.
West Indies:
 climatological data, 3096
 lights and fog signals, lists, 5331, 9972, 14578
 mahogany trees, killing unwanted trees by peeling and frilling, 12573
 sailing directions, changes, 14572, 17069
West Virginia:
 air pollution, climatological aspects, 6219
 area measurement report, 10338
 census of agriculture, 1964, State and county statistics, 8962
 census of mineral industries, 1963, area statistics, 7464
 climatological data, 3096
 county business patterns, 4321, 12064
 electric rate book, 1057
 mineral industry, minerals yearbook chapter, 6670
 postal map, 5401
 precipitation data, hourly, 3401
Wester, Robert E., suburban and farm vegetable gardens, 8831
Western Europe, *see* Europe.
Western Hemisphere, *see* Hemisphere, Western.
Western hemlock, *see* Hemlock.
Western larch, *see* Larch.
Western pine beetles, *see* Beetles.
Western region, *see* West (U.S.).
Western States, *see* West (U.S.).
Western Union Telegraph Co., wage chronology, 14299
Western Utilization Research and Development Division, publications and patents, semiannual lists, 16, 11925
Western white pine, *see* Pine.
Westfall, Benton B., 2d decennial review, conference on cell tissue and organ culture, 18172
Westmark, David O., regional lactic acid concentration in dogs under acute hypoxia, 1739

Westport, Conn., behavior of beach fill and borrow area at Sherwood Island State Park, 13976
Weston, Kenneth C.:
 nitrogen injection into boundary layer on graphite surface in high-temperature dissociated airflow, 12964
 stagnation-point boundary layer with suction and injection in equilibrium dissociating air, 8499
Wetlands, *see* Swamplands.
Whalen, Mark A., nomination, hearings, 6094
Whaley, Bob L., fall water supply summary for Nevada, 17205
Whaling, international convention, schedule, amendments, 7161
Wharton, Walter J., Extension Service review, 3255
What are public lands?, 8327
What kind of a people are we? 18245
What makes food prices?, 2173
What will happen to our inland seas? 8244
What you can do about water pollution, 17768
Whatever happened to the individual? (address), 10319
Wheat:
 Canadian, marketing, 4816
 certificates—
 advance payments to producers, hearing, 17588
 statutes, compilation, 7262
 cracked bulgur, good choice for thrifty family, food value, use, recipes, 9341
 export program conducted by Commodity Credit Corp., GAO review, 14159
 farm stored, how to control insects, 4112
 fumigating with methyl bromide, methods, 15861
 futures—
 commitments of traders, 3112
 trading and open contracts, 3368
 inert dusts as protectants against insects in bins, evaluation, 8835
 international agreement, extension, protocol, 17246
 marketing allocation program, need to further revise regulations to minimize loss of proceeds to Government, GAO report, 1100
 pasture, 4063
 production, moisture conservation in upper Snake River dryfarming area, 4088, 11723
 program 1966, statistical summary, 8818
 rolled, good choice for thrifty family, recipes, 9343
 utilization research, 4th national conference, 6
 wheat situation, 4064
 winter, crop production, 2938
Wheat flour, *see* Flour.
Wheeler, Earle G., testimony, hearing, 16394
Wheeler, Kermit E., legal status of women in Maryland, 1667
Wheeler, P. C., evaluation of semi-active gravity gradient system, 2597-98
Wheels, lateral ring metal elastic, absorbs shock loading, 6821
Whelan, Joseph G., world Communist movement, selective chronology, 12206
Where and how to get a farm, some questions and answers, 17321
Where do we go from here (address), 7918
Where do you go when the go-go's gone? 8797
Whiskers, boron carbide, straight growth produced in radial furnace, 9836
Whiskeytown Lake, unit of Whiskeytown-Shasta-Trinity National Recreation Area, general information, 11619
Whitcomb, Warren, Jr., controlling greater wax moth, pest of honeycombs, 10169
White, A. M., fabrication process for zirconium-aluminum composite pressure tubing, 8907

INDEX 1967

- White, Emily T., statistical reporter, 3900
 White, Ernest J., United States Air Force JAG law review, 3453
 White, George A., culture of crambe, new industrial oilseed crop, 4140
 White, Hosea D., Jr., evolution of satellite PFM encoding systems, 5241
 White, John H., James Millholland and early railroad engineering, 11602
 White, Maurice D., piloted simulation study of operational aspects of staff pitch-up, 12967
 White, Richard A., relief, 12230
 White, Robert M., address, Jan. 31, 1967, 7937
 White Canyon mining district, uranium deposits, 6391
 White-collar pay supplements, 6620
 White-collar workers, see Government officials and employees.
 White County, Nev., Ely mining district, distribution of gold, silver, tellurium, and mercury, 9564
 White fir, see Fir.
 White grubs, see June bugs.
 White House china of Lincoln Administration, 15600
 White Mountain, Alaska, mercury deposits, investigations, 6677
 White pine, see Pine.
 White-pine weevils, see Weevils.
 White rats, see Rats.
 White Sands National Monument, general information, 6986
 White winged doves, see Pigeons.
 Whitesell, Craig D., queensland maple seedlings in Hawaii, growth accelerated after first year, 8090
 Whiting, Wilhelmina F.:
 bituminous coal and lignite mining, 167
 coal mining, 166
 metal mining, 8934
 Whitlow, Jesse W., geology of Potosi quadrangle, Great County, Wis., and Dubuque County, Iowa, 6388
 Whitman, Robert A., iron and steel, 2544
 Whitmore, John, Naval Ship Systems Command technical news, 3609
 Whitney, Linwood F., Jr., cloud measurements using aircraft time-lapse photography, 10967
 Whitney, Warren J., overall stator performance and turbine design, cold air investigation of turbine for high-temperature engine application, 5236
 Whitney, Wayne T., helium-neon laser discharge parameter study, 17086
 Whittaker, James C., costs and returns for hardwood lumber production in Appalachian region of Kentucky and Ohio, 4850
 Whittemore, W. L., differential neutron thermalization, 13323
 Whittick, J. S., analytical chemistry instrumentation, 16933
 Whitton, Rex M., remarks, Nov. 29, 1966, 2844
 Who will open this child's eyes, 15208
 Wholesale prices, see Prices.
 Wholesale trade:
 Azerbaydzhan SSR, wholesale networks, problems, 1171
 census of business 1963, subject reports, bound volume, 7456
 primary market price index, monthly report, 4067
 sales and inventories, monthly report, 3584
 supplement, 5888
 see also names of commodities and industries.
 Whooping cranes, see Cranes (birds).
 Why not be an engineer? 11913
 Why we fight in Viet-Nam, 11824
 Why women work, 13189
 Whyte, William, USDA employee newsletter, 4012
 Wichita, Kans., area wage survey, 5064
 Wichita Mountains Wildlife Refuge, general information, 9516, 14060
 Wichmann, AIC 75 B, lunar chart, 7327
 Wicker, Ed F., seed collection and storage for *Arceuthobium* spp., 9541
 Wicking materials, transport properties and boiling characteristics, vapor-chamber fin studies, 14379
 Wideman, F. L., technologic trends in mineral industries (metals and nonmetals except fuels), 5136
 Widows and widowers, widows with children under social security, survey, 2869
 see also Pensions.
 Wiedner, Samuel, radiological health data and reports, 3805
 Wier, Kenneth L., geology of Kelso Junction quadrangle, Iron County, Mich., 6392
 Wigner coefficients, see Coefficients.
 Wilfala, S. W., water resources of Marquette Iron Range area, Mich., 14183
 Wilcox, Ansley, House, see Ansley Wilcox House.
 Wild animals, see Animals.
 Wild Bill range, see Coccolino National Forest.
 Wild Rice River and Valley:
 south branch, and Felton ditch, channel improvement, engineer report—
 departmental edition, 9422
 document edition, 9071
 Wilder, Charles S.:
 acute conditions, incidence and associated disability, United States, 14637
 cost and acquisition of prescribed and nonprescribed medicines, U.S., 5467
 health characteristics by geographic region, etc., 10068
 Wilderness areas:
 Desolation primitive area, Sierra Nevada, Calif., mineral resources, 11169
 Devil Canyon-Bear Canyon primitive area, Calif., mineral resources, 8155
 High Uintas primitive area, Utah, mineral resources, 12598
 importance (address), 10158
 national forests, 8838
 national system, annual report, 7607
 Pine Mountain primitive area, Ariz., mineral resources, 11168
 San Geronimo Wilderness Area, family winter recreational use, hearings, 2050
 studies related to wilderness (series), 8155-56, 11166, 12598
 studies related to wilderness-primitive areas (series), 11169, 12604
 studies related to wilderness-wildlife refuges (series), 17821
 Wilderness, Battle of the, 1864, where hundred thousand fell, 1533
 Wildlife:
 code of Federal regulations, 9486
 conservation—
 career preparation, 6352
 estuarine areas, preserve, etc.—
 hearings, 4635, 9164
 report, 695
 protection, and propagation of endangered native species, law, 388
 fish and wildlife programs, 6348
 Greenspan grants to provide more space, general information, 5672
 man and wildlife, animal damage control policy, for Sport Fisheries and Wildlife Bureau, 11078
 monolayers for evaporation control of water, effect on wildlife, 7102
 publications, price list, 18149
 rare and endangered, U.S., list, 2281
 special scientific reports, wildlife series, 4809-10, 6357, 12550, 14067-68, 15268, 16633-635
 water resource projects, cost sharing grants, report, 16365
 wildlife leaflets, 11091, 16637, 17788

- Wildlife—Continued
wildlife review, abstracting service, 4068
see also Animals.
- Wildlife refuges:
managers, address list, 4805
national—
general information, 4808, 17785
list, 6355
northeast, region 5, 1078
surplus animal disposal, 16622
Washington Coast, general information, 8518
- National Wildlife Refuge System, administration, law, 388
refuge leadets, 1078-79, 2277-79, 4803-6, 6353-55, 8027-32, 9516-19, 11079-89, 12547, 14060, 15259-265, 16622, 17775-782
studies related to wilderness-wildlife refuges (series), 17821
see also names of refuges.
- Wiley, Llewellyn N.:
describing airman performance in administrative career ladder by identifying patterns of trait ratings, 11952
job types of communications officers, 15892
- Willford, Enid L., architecture, building engineering, 13266
- Willhite, Lawrence P., summer planting of slash pine shows promise in Florida, 8118
- Wilkinson, Thomas L., moisture cycling of trussed rafter joints, 8101
- Willamette River and Valley, French Prairie area, geology and water resources, 14179
- Willard Dam, technical record of design and construction, 8671
- Willford, Wayne A., investigation in fish control, 16624
- William Langer Jewel Bearing Plant:
designate—
law, 488
report, 2091
- Williams, Carroll B., jr.:
characteristics of forest floors and soils under true fir-hemlock stands in Cascade Range, 11139
differential effects of 1944-56 spruce budworm outbreak in eastern Oregon, 1097
possible grouse damage on true firs, 1090
snow damage to coniferous seedlings and saplings, 1091
- Williams, Ellis T., timber owner and his Federal income tax, 10161
- Williams, Frank E.:
fluorspar deposits of New Mexico, 2540
urbanization and mineral aggregate industry, Tucson, Ariz. area, 5105
- Williams, Frederick W., prediction of absolute entropies from gas chromatographic retention data, 18111
- Williams, Garnett P., fume experiments on transport of coarse sand, 16695
- Williams, Grover S., digest of public general bills and selected resolutions, 3206
- Williams, Jack C., soil survey, Gray County, Tex., 8697
- Williams, James D.:
effects of air pollution, 5441
metropolitan planning program relationships to air resource management, 13084
opinion surveys and air quality statistical relationships, 5442
paper, Apr. 26, 1967, 17116
- Williams, John A.:
soil survey of—
Beaver Creek area, Ariz., 11803
Zuni Mountain area, N. Mex., 15749
- Williams, Llewellyn, growing ginseng, 14742
- Williams, Muriel, relief, 298, 590
- Williams, Peter M., simulation of gaseous core nuclear rocket mixing characteristics using cold and arc heated flows, 12848
- Williams, Robert L., prolonged stage 4 and 1-REM sleep deprivation, EEG, task performance, and psychologic responses, 15900
- Williams, Roger L., reconnaissance of yttrium and rare-earth resources in northern New Jersey, 6674
- Willis, Conrad M., geometric efficiency of electroformed nickel solar concentrator, 14469
- Willis, Doreen D., relief, 9230, 13502, 13600
- Willis, E. P., geology of Arabian Peninsula, Bahrain, 6403
- Williston, N. Dak., District Court term, additional place, report, 12395
- Willmorth, Norman E., influence of screening and overlapping imagery on speed and accuracy of photo interpretation, 14804
- Willow Springs and Sag Junction diversions, Chicago Sanitary and Ship Canal, Ill., 10932
- Willows, stored, relation of visual estimates of decay to specific gravity loss, 2290
- Wilmarth, Harold G., relief, 280, 613, 840
- Willmot, Charles A., engineering and economic aspects of cotton gin operations, MidSouth, west Texas, Far West, 12542
- Wilson, Billy F., sediment porosity meter, feasibility study, 10303
- Wilson, Cynthia V.:
climatology, Northern Hemisphere, 14793
radioactive fallout in northern regions, 14794
- Wilson, James E.:
Apollo program pace and progress, 10676
future national space objectives, 2058
- Wilson, James W., movement and predictability of radar echoes, 6220
- Wilson, Mildred S., euryhaline copepod genus Eurytemora in waters of Cape Thompson region, Alaska, 6943
- Wilson, Peter C., inventory of U.S. exploratory longline fishing effort and catch rates for tunas and swordfish in northwestern Atlantic, 14063
- Wilson, R. E., handbook of supersonic aerodynamics, sec. 13-14, viscosity and heat transfer effects, 1542
- Wilson, Ralph A., Project Fire Scan, fire detection interim report, 8106
- Wilson, Richard F., correlation of Upper Triassic and Triassic (?) formations between southwestern Utah and southern Nevada, 6393
- Wilson, Robert W., jr., Northeastern forest-inventory data-processing system, 11134
- Wilson, Ronald J.:
landing contact conditions—
X-15 airplane, 5271
XB-70 airplane, 11548
- Wilson, Ronald W., cigarette smoking and health characteristics, 10067
- Wilson, Setsuko, relief, 9254, 13602, 17490
- Wilson, N.Y.:
harbor, engineer report—
departmental edition, 10963
document edition, 10510
- Wilson, Woodrow, Memorial Commission, see Woodrow Wilson Memorial Commission.
- Wilson's snipes, see Snipes.
- Wilt disease, bacterial wilt and Stewarts leaf-blight of corn, 5626
- Wiltelius, William J., effects of monolayers on insects, fish and wildlife, 7102
- Winalski, Patricia, model secondary school for deaf act, legislative summary, 8192
- Winchell limestone, see Limestone.
- Winchester, Clarence F.:
effects of protein and energy intake on nitrogen retention and growth of cattle, 1723
malnutrition of young cattle, effect on feed utilization, eventual body size, and meat quality, 14765
- Wind, see Winds.
- Wind River Arboretum, pioneer search for better kind of trees for Northwest, 14147

INDEX 1967

- Wind River Reservation, lands in trust status, report, 15074
- Wind tunnels:
 - ablative heat shield materials for X-15-2, arc-tunnel evaluation, 5238
 - Apollo testing program, historical development of general configurations, 2722
 - interference factors for tunnels of arbitrary cross-section, calculating method, 14993
 - investigation of static aerodynamic characteristics of all-flexible parawing vehicle, 11488
 - low-subsonic, paraglider configuration, free-flight drop-test investigation, 1475
 - tables of interference factors for use in correcting data from VTOL models in wind tunnels with 7 by 10 proportions, 9825
 - tests, subsonic transport with aft engine nacelles and high tail, 5268
- Windber, Pa., demonstration mine using longwall mining techniques, feasibility study and supplement, 7868
- Windbreaks, forest and windbarrier planting and seeding in U.S., report, 8127
- Windler, A. Stewart, jr.:
 - effect of flow rate on parotid fluid calcium and protein levels, 7363
 - magnesium, and protein concentrations in human, 10239
- Window wipers, *see* Windshield wipers.
- Windows:
 - controls for automotive vehicles, Federal standard, 6326
 - rear window defogger for automotive vehicles, Federal standard, 6332
- Winds:
 - components of 1000-mb. winds of Northern Hemisphere, 6991
 - evaluating winds aloft by simplified field technique, 4838
 - jet streams, parameters and forecasting instructions in Kazakhstan, USSR, 4994
 - launch vehicle wind and turbulence response by nonstationary statistical methods, 15505
 - profiles, sphere behavior, and measurement, 11537
 - Santa Ana winds, 3-dimensional structure, characteristics, 4855
 - surface wind roses, monthly and annual, resultant surface winds, midseasonal, maps, 13989
 - temperature and wind velocity combinations, recurrence in lower 100-m layer of atmosphere, experimental calculation, 11565
 - upper stratosphere and mesosphere measurements, 17012
 - upper wind code, WRAN coding instructions, manual, 18254
 - see also* Solar wind.
- Windshield wipers and washers for automotive vehicles, Federal standard, 6322
- Windward Islands:
 - Dominica—
 - Bredin-Archbold-Smithsonian biological survey, 5516, 6962, 11612, 14540
 - diptera (Anisopodidae and Bibionidae), new species, 6962
 - echinoids, 5316
 - marine archannelids, 11612
 - Peace Corps program, agreement, 11850
- Wine:
 - imports into D.C., limit—
 - hearings, 12294
 - report, 14993
 - unfit for beverage use, tax-free withdrawal from bonded storage—
 - law, 16129
 - reports, 9088, 15092
- Wing-body combinations, *see* Airplanes.
- Wingate, John W., small store planning for growth, 2857
- Wingate, Robert T., matrix analysis of longitudinal and torsional vibrations in non-uniform multibranch beams, 6886
- Wings (aircraft):
 - and wing-body combinations in supersonic flow, integrated approach to analysis and design, 1493
 - aspect ratio and curvature variations for axial-flow-compressor-inlet stages under high loading, 9916
 - aspect-ratio & conical parawing utility vehicle, flight characteristics, 5229
 - curved-leading-edge, employing various degrees of twist and camber, aerodynamic characteristics at Mach 2.03, 6874
 - delta and double delta flow fields at low speeds, 6724
 - delta, sharp-edge, vortex lift, concept based on leading-edge-suction analogy, 2726
 - diamond-cross-section delta wing configurations, hypersonic performance, 9584
 - fusion welded simulated structure under environment of supersonic transport, fatigue material, 16905
 - large semispan tilting wing, etc., aerodynamic data, 1485, 6855, 15557
 - leading-edge separation, aerodynamics of slender wing-body combinations, theoretical investigation, 8415
 - low-aspect-ratio, ram-air-inflated fabric, static aerodynamic characteristics, 17007
 - parawing, all-flexible—
 - landing lifting-body spacecraft, low-speed tests, 11550
 - wind-tunnel investigation of static aerodynamic characteristics, 11488
- sailing, aerodynamic characteristics, 14465
- skewed wing-tip controls, effect on variable-sweep wing-fuselage configuration, 8487
- swept arrow wing model with variations in horizontal-tail height, wing height, and dihedral, static stability characteristics, 14473
- swept, wake momentum surveys of boundary-layer skin friction, 2725
- tension-structure parawings, low-speed wind-tunnel investigation, 14454
- tilting, large semispan, with 0.5-diameter chord, single-slotted flap, and single propeller 0.19 chord below wing, aerodynamic data, 9879
- triangular and modified triangular, planform effects on aerodynamic characteristics, errata, 1420
- wing body combinations cranked leading edge, aerodynamic characteristics, 18039
- Winniboschish band of Chippewa Indians, *see* Chippewa Indians.
- Winnick, Pauline, it's the latest, it's the greatest, it's the li-ber-ee, 12466
- Winslow, John D., geology and ground-water resources of Portage County, Ohio, 11172
- Winstead, Jack A., mechanism of substrate protection of enolase and lactic dehydrogenase against ionizing radiation, 14774
- Winter:
 - construction practices, earthwork, concrete and asphalt survey, 98
 - maintenance of Haines Road, agreement with Canada, 8728
 - winter storms, general information, 17739
- Winter wheat, *see* Wheat.
- Winters, Harold F., vegetable gardening in Caribbean area, 15836
- Wipers (window), *see* Windshield wipers.
- Wire:
 - barbed wire command, 14796
 - embedment and other metallurgical and mechanical characteristics of cross-wire resistance welds, 2698
 - film boiling from horizontal wire, laminar flow analysis, 14456

Wire—Continued

- high temperature stranded hookup wire, evaluation tests, 11459
- hot wire techniques in low density flows with high turbulence levels, study, 6841
- material reduces compressor blade vibration, 6824
- matrices, gases flowing through at surface temperatures to 5500° K, forced-convection heat-transfer correlations, 9913
- silver-base ternary alloy proves superior for slip ring lead wires, 5212
- smoke-wire technique for measuring velocities in air, 10293
- teflon insulated, technique for stripping, 8471
- see also Electric wire and wiring—Exploding wires.
- Wire bar supports for reinforced concrete construction, standard of trade, 6919
- Wire communication, demand for flowers-by-wire, 10179
- Wire feed manipulators, manipulator and welding torch, 17993
- Wire mills, scrap and metal consumption and stocks, mineral industry survey, monthly, 3062
- Wire tapping:
 - prohibit wire interception and eavesdropping, hearings, 10858, 17662
 - right of privacy act of 1967, hearings, 12306
 - use by persons other than officers investigating crimes, prohibit, hearings, 15166
- Wiring, see Electric wire and wiring.
- Wireworms, irrigated lands in the West control, etc., 10170
- Wirtz, Willard:
 - addresses, etc.—
 - Jan. 22, 1964, 5033
 - Oct. 18, 1966, 1349
 - Oct. 24, 1966, 1354
 - Oct. 25, 1966, 1353
 - Dec. 28, 1966, 5038
 - Dec. 29, 1966, 5037
 - Feb. 6, 1967, 6589
- Secretary of Labor, accepting on behalf of the President the—
 - Family of Man award (remarks), 1353
 - Margaret Sanger award in world leadership (remarks), 1349
- Wisander, Donald W., wear and friction of polymer laminates in liquid nitrogen and in liquid oxygen, 2693
- Wisconsin:
 - area measurement report, 12036
 - census of agriculture, 1964, State and county statistics, 7506
 - census of manufactures, 1963, area statistics, 165
 - census of mineral industries, 1963, area statistics, 4299
 - climatological data, 3096
 - county business patterns, 1871, 13384
 - electric rate book, 6264
 - hardwood face veneer and plywood—
 - distribution and end-uses, 8074
 - mill closures, 2308
 - iron formations, samples and metallurgical evaluation, 6673
 - landings, fishery products, 3553, 11073
 - mineral industry, minerals yearbook chapter, 6671
 - pollution of interstate and intrastate waters of upper Mississippi River and its tributaries, conference, proceedings, 14052, 15253
 - precipitation data, hourly, 3401
 - soil survey laboratory data and descriptions, 17209
- Wisner, Leland F., scheduled air taxi operators, 9446
- Wispé, Lauren, attitudes and motives of MDTA trainees, pilot, investigation, 5035

- Witches' broom disease, Gymnosporangium clavariiforme in witches'-brooms of Juniperus communis, 8809
- Witnesses, National Advisory Commission on Civil Disorders, investigations, compulsory attendance, testimony, and production of evidence, law, 13541
- Wives, working, their contribution to family income, 11914
- Wolcott, Don E., geology of Hot Springs quadrangle, Fall River and Custer Counties, S. Dak., 12597
- Wolf, Ken, bacterial kidney disease of salmonid fishes, 4802
- Wolf Creek Dam, fish hatchery, establish, hearing, 10665
- Wolf Lake, pollution of interstate waters, progress evaluation meeting, 14053
- Wolf Trap Farm Park:
 - establish—
 - law, 12155
 - reports, 625, 665, 873, 2086
- Wolfe, Jack A., tertiary plants from Cook Inlet region, Alaska, 2365
- Wolfe, William L., handbook of military infrared technology, 8584
- Wolfgang, Marvin E., culture of youth, 7232
- Wolfson, David E.:
 - carbonizing properties of coals from—
 - Fayette and Greenbrier Counties, W. Va., 2576
 - Logan and Mingo Counties, W. Va., 5130
- Wollerman, Edward H.:
 - boxelder bug, 17795
 - locust borer, 9529
- Womack, David P., measurement of dynamic characteristics of soils with penetrometers, 14396
- Women:
 - changing patterns of women's lives, fact sheet, 10136
 - civil and political status, 1966 State legislation, highlights, 11910
 - college, 7 years after graduation, resurvey, 7235
 - Congress, 90th, biographies, 14728
 - continuing education programs, 5607
 - counseling—
 - and guidance, 7236
 - awareness, analysis, action, 13968
 - earnings in poor families, fact sheet, 7238
 - educational attainment, trends, 7239, 14726
 - fact sheets, 7237, 13186
 - employment and training opportunities in professions, selected readings, 1669
 - employment of women with family responsibilities, ILO recommendation, 5990
 - employment, sex discrimination, laws, 17295
 - equal pay—
 - activity in State legislatures, 2974
 - laws by State, 2975
 - under Fair labor standards act, as amended, 7224
 - family and property law, summary—
 - New Jersey, 10138
 - New York State, 10139
 - Ohio, 13187
 - Federal employment of women (periodical), 3280
 - fuller utilization of talents (address), 8798
 - highlights of 1966 State legislation, 11910-911
 - international cooperation on programs advancing status of women, reports of U.S. Government agencies, 8793
 - Job Corps centers, facts, 10908
 - jobs that count in Air Force, 10223
 - jury service, eligibility, laws, 5603
 - legal status in U.S., Maryland, report, 1687
 - nature workers, bibliography, 5597
 - Michigan, upper Peninsula economy, conference, 2977

INDEX 1967

Women—Continued

- Negro, in U.S., new roles, new challenges (address), 1668, 10142, 17296
 - New York City, counseling and vocational guidance services, 5599
 - nonwhite, educational attainment, fact sheet, 13185
 - nonwhite workers, fact sheet, 5601
 - North Dakota, new horizons, conference report, 5606
 - officers in Armed Forces, remove promotion restrictions, etc., amend U.S. code—
 - hearings, 9148
 - report, 10565
 - political rights, convention, hearings, 7806, 16410
 - professional and technical positions, fact sheet, 5602
 - progress—American women, news release, 3776
 - serving America as woman marine, 11341
 - State labor laws, summaries—
 - Delaware, 8794
 - Feb. 1967 summary, 11907
 - Ohio, 11912
 - State legislation of special interest, 10141
 - status—
 - progress in 1966, report, 15323
 - statewide meeting of Governor's Commission on Status of Women, held at Des Moines, Iowa, 10143
 - unions and changing status of women workers, conference, 5608
 - unless we begin now (equal employment opportunity, address), 1932
 - war on poverty, conference proceedings, 16481
 - why not be an engineer? 11913
 - why women work, 13189
 - womanpower policies, 17886
 - women and the year 2000 (remarks), 4246
 - women in poverty, jobs and need for jobs, 14727
 - work in Forest Service, career opportunities, 13231
 - workers—
 - maximum daily hours, by States, 2976
 - maximum weekly hours, by States, 8795
 - New York State, 1670
 - Oklahoma, 2978
 - Oregon, 2979
 - Pennsylvania, 5610
 - underutilization, 5609
 - United States, background facts, 14725
 - utilization, 18255
 - working women and day care needs, consultation, preliminary report, 15820
- ## Women workers, see Women.
- ## Women's Bureau :
- bulletins, 5598, 7235
 - leaflets, 5604-5, 11913, 13188
 - pamphlet, 5607
 - publications, list, 5604
- ## Women's clothing, see Clothing—also names or types of clothing.
- ## Wong, Edgar L., reaction rates of carbon monoxide with hydroxyl radicals and oxygen atoms, 16997
- ## Wong Ock Wah, see Hom Shek See, and wife.
- ## Wood, David A., tumors of intestines, 15181
- ## Wood, Don J., effect of propellant-feed-system coupling and hydraulic parameters on analysis of chugging, 11491
- ## Wood, Fergus J., Prince William Sound, Alaska, earthquake of 1964 and after-shocks, 12117
- ## Wood, Robert C. :
- addresses—
 - Apr. 29, 1967, 11209
 - Sept. 8, 1967, 16716
 - bibliography of published works, 6416
- ## Wood, Robert E., equation of state for helium-nitrogen mixtures, 8374

- Wood, A. R., Manufacturing Co., President's E award for export excellence presentation (remarks), 4448
- Wood :
 - and related products, trade and tariff information, summaries, 8765
 - Appalachian woods, suitability for sanitary tissue and toweling, 8100
 - aspen characteristics, properties, and uses, review of recent literature, 14134
 - bleaching, 15282
 - brick tile for paneling, 14133
 - charring rate—
 - review of information, 8059
 - selected woods, transverse to grain, 11132
 - composites, industrial evaluation of radiation, 5780
 - construction, picnic shelter, building plan, 5661
 - cordwood yields from thinnings in young oak stands in Missouri Ozarks, 2307
 - decay in houses, how to prevent and control, 17316
 - effect of inorganic salts on pyrolysis determined by dynamic thermogravimetry, 8103
 - fire performance, publications, list, 14081
 - light-induced free radicals in wood, 4846
 - lignin production and detection in wood, 8060
 - members, effect of size on bending strength, 1094
 - modified woods, list of publications, 8054
 - paintability of 2 Hawaii-grown woods, 4843
 - preservation, publications, list, 14083
 - products—
 - home and farm building, selection and use, 7264
 - military support activities, Pacific basin market, 1098
 - probe for accurate determination of moisture content, 2298
 - shavings, economic potentials for baling, in western resource conservation and development project areas, 10920
 - stake tests, comparison of wood preservatives, 1967 progress report, 15281
 - structural design for buildings, Army technical manual, 10273
 - structural elements in tension, horizontal testing machine, 8062
 - untreated, factors influencing decay, 8066
 - used for cabins, rustic work, and unseasoned, protecting from injurious insects in eastern United States, 5627
 - wood-base fiber and particle panel materials, thermal conductivity, 14124
 - see also Heartwood—Softwood—also names of articles manufactured from wood.
- Wood County, Ohio, soil survey report, 5517
- Wood finishing :
 - painting outside wood surfaces, 1088
 - publications, list, 14082
- Wood poles, see Poles.
- Wood preservation, see Wood.
- Wood preservatives :
 - comparison in Mississippi post study, 1967 progress report, 11110
 - comparison, stake tests, 1967 progress report, 15281
 - preservative treatment of fence posts and farm timbers, 10165
- Wood pulp :
 - current industrial reports, 3169
 - factors for converting Midsouth pulpwood from cords to cubic feet, 8096
 - harmful pitch in woodpulp, review of methods for estimating, 11112
 - production—
 - north central region, 1965, by county, 2337
 - southern, 2339
 - pulpwood prices in Southeast, 2319, 15286

Wood pulp—Continued
pulpwood production in Northeast, 4857,
8122, 14146
revised table, 17807
rising pulpwood prices stimulate largest
Lake States pulpwood harvest, 14101
see also Paper.

Woodcocks:
hunting, possession, transportation, impor-
tation in Alaska, 1967-68, Federal regu-
lations governing, 14061
research and management, 14068

Woodlin, Richard O., Jr., computer program
for calculating veneer recovery volume and
value, 16644

Woodhouse, W. W., Jr., dune stabilization
with vegetation on Outer Banks, N.C.,
16523

Woodlands, *see* Forests and forestry.

Woodmansee, Walter C.:
mineral industry of—
Algeria, 2549
Ethiopia, 6649
Liberia, 6654
Libya, 6655
Malagasy Republic, 6057
Morocco, 8357
Nigeria, 6662
other areas of Africa, 12805
Senegal, 8363

Woodpulp, *see* Wood pulp.

Woodrow Wilson Memorial Commission, final
report, 768

Woodruff, Robert E., review of genus
Euparixia, etc., review, 15606

Woods, John C., soil survey of Houston and
Peach Counties, Ga., 14656

Woods, *see* Wood.

Woodward, Henry T., prediction of shock-
layer radiation from molecular band sys-
tems in proposed planetary atmospheres,
6890

Woodworking machinery:
and equipment, Federal item identification
guides for supply cataloging, supple-
ments, 3286
wood shaper, how to inspect chart, 9692

Woody plants, *see* Plants.

Wool:
and related data, statistics 1920-64, 1966
supplement, 13249
and wool tops, futures trading and open
contracts, 3366
automating weaving looms, 1186
broad woven goods, current industrial re-
ports, 3170
consumption on woolen and worsted sys-
tems, current industrial reports, 3169
foreign agriculture circulars, 3345
futures, commitments of traders, 3111
market news, weekly summary and sta-
tistics, 3518
production—
price and value, 8763
revised estimates, 1960-64 by States,
7297
shorn, 14701
textiles, depth of cut in tariff rates, 6th
round GATT trade negotiations, 13354
wool situation, 4069
yarn and broadwoven fabric, industry
wage survey, 15446
see also names of articles or materials
manufactured from wool.

Woolens, machinery activity, current indus-
trial reports, 4846, 12083

Woollett, Richard R., magnitude of non-
linearities in collisionless magnetoplasma
waves, 5253

Wooten, Elzie H., nomination, hearing, 6123

Worcester, Mass., area wage survey, 15443

Word, John L., static parasitic speed con-
troller for Brayton-cycle turboalternator,
17004

Words, memory word line configuration al-
lows high storage density, 6780

Work:
changing cultural patterns, 5042
construction industry safe work guides,
11302-306
equal pay for equal work under fair labor
standards act, 11897
jobs and mentally restored, memo to psy-
chiatrists, 5051
motivational factors affecting Army re-
search and development personnel, 4228
platform is supported by self-locking
blades, 12906
prisoners, release program for persons
sentenced by courts of D.C.,
authorize—
hearings, 727
law, 507
rural youth, what kind of work would you
like to do? 15222
when injured at work, Federal employees
guides, 7921, 15219
work performance of physically impaired
workers, 14612
work statement preparation, AFSC, 5701
see also Employment — Occupations —
Women.

Work accident costs, 9718

Work injuries, *see* Injuries.

Work Programs Bureau, I see a future, de-
scription of programs, 17297

Work stoppages, *see* Strikes and lockouts.

Workable program for community improve-
ment, guide for citizens advisory commit-
tees, 9579

Workbooks, Atlantida, case study in house-
hold sample surveys, 10387

Workers, *see* Farm labor—Labor—Personnel
workers—Volunteer workers—Women.

Working for U.S.A., 14569

Working mothers, *see* Mothers.

Working wives, their contribution to family
income, 11914

Working women, *see* Women.

Workmanship standards for fusion welding,
14365

Workmen's compensation, *see* Employers' li-
ability and workmen's compensation.

Workshops:
bioengineering research and manpower,
national workshop, Philadelphia, Pa.,
Nov. 9, 1965, proceedings, 15703
sheltered—
and rehabilitation facilities, standards,
10129
pathway to regular employment, 6593
report of Secretary of Labor to Con-
gress, 18252
under fair labor standards act, wage pay-
ments to handicapped clients, technical
report, 18252

Workshop for Baptists on deafness and
rehabilitation, University of Tennessee,
2968

workshop series of Pharmacology Section,
N.I.M.H., 17173

World affairs, *see* International relations.

World agricultural production and trade,
statistical report, 4072

World agricultural situation, review of 1966
and outlook for 1967, 4702

World atlas of atmospheric radio refracti-
vity, 4747

World Communist movement, selective
chronology, 12206
print as House document, reports, 10593,
10757

World Farm Center:
endorse the concept, resolution—
hearing, 17634
report, 13626

World food needs (paper), 16496

World food problem, report of President's
Science Advisory Committee, 11708-707

World food situation, prospects for world
grain production, consumption, and trade,
15209

INDEX 1967

World geography II, study guide, 15180
 World list of future international meetings, 4073-74
 World motor vehicle production and registration, 8926
 World power data, capacity of electric generating plants, etc., 1058
 World production and trade, tallow & greases, 4817
 World strength of Communist Party organizations, 13155
 World trade, *see* Commerce.
 World War, 1914-18, *see* European war, 1914-18.
 World War, 1939-45:
 Italian Armed Forces records, guide, 17028
 Japanese operations in southwest Pacific area, 1392
 Marine Corps operations, central Pacific drive, 12783
 neuropsychiatry, in zone of interior, 13311
 United States Army in World War II, 5096
 World weather records, 1951-60, Asia, 9435
 Worldwide military commitments, hearings, 944, 10816
 Worley, Charles E., micrometer measures of 1164 double stars, 15623
 Worms, *see* names of worms.
 Worrell, L. W., motors, spring, weight and animal-powered, classification definition, 18130
 Worst:
 machinery activity, current industrial reports, 4346, 12083
 systems, consumption, current industrial reports, 3169
 Worth, Muriel P., public roads, journal of highway research, 3785, 10071
 Worthington, Norman F., labor requirements in thinning Douglas-fir and western hemlock on 2 experimental forests in western Washington, 4837
 Wortz, E. C., astronaut capabilities to perform extravehicular functions in weightless conditions, 15507
 Wounds, transportation of sick and wounded, Army field manual, 100
 Woven goods, *see* Textiles—Wool.
 Wrecking:
 demolition operations—
 how to inspect chart, 9693
 occupational safety aid, 9719
 safety training programs, instructor outline, 1357
 Wrenches:
 pneumatic wrench retains or discharges nuts or bolts as desired, 6701
 single wrench separates nuts from free-floating bolts, 14363
 ultrasonic wrench produces leaktight connections, 17065
 Wrestler, Clifton G., Jr., drag measurements in stream with sinusoidally fluctuating velocity in longitudinal direction, 5749
 Wright, Evan B., potential and magnetic moment of superconducting torus in non-axial uniform magnetic field, 9986
 Wright, Stanton Macdonald, art, retrospective exhibition, 11595
 Writing:
 Air Force writing (periodical), 3010
 and editing positions, printed media, radio, television, etc., examination announcement, 4411
 amendment, 10418
 brush up on your writing with these selected U.S. Government publications, list, 17130
 contest news, hospitalized veterans writing project, 5584
 need to read and write, adult basic education, leaflet, 10936
 text-workbook for success in Navy—
 book 1, 2778

Writing—Continued
 text-workbook for success in Navy—con.
 book 2, 2779
 recruit's day-to-day experiences, 2780
 WS series, 3361
 Wu, Chang-You, relief, 10543, 13483, 13741
 Wupatki National Monument, general information, 8563
 Wurmband, Richard, testimony, hearing, print additional copies, report, 12371
 Wykes, Arthur A.:
 tissue monoamine oxidase inhibitions by convulsigenic doses of hydrazines and related Be-hydrazones, 4181
 toxicology of boron hydrides, etc., 7357
 Wynn, N. A., Jr., costs of storing and handling farmers' stock peanuts in commercial facilities, 10923
 Wyoming:
 alpine soils, pot tests of productivity and nutritive status, 2317
 census of agriculture, 1964, State and county statistics, 8965
 census of mineral industries, 1963, area statistics, 4300
 climatological data, 3096
 county business patterns, 12065, 17428
 electric rate book, 11027
 iron ore deposits, description, etc., 5104
 lodgepole pine, yield tables for managed stands, 11140
 mineral industries, water requirements and uses, 12796
 mineral industry, minerals yearbook chapter, 2566
 natural resources, 2392
 northwest, gold-bearing sedimentary rocks, preliminary report, 9569
 phosphate industry and its resources, evaluation, 11370
 Pierre shale—
 Cretaceous, new echinoid, 2363
 upper Cretaceous, Red Bird section, 2363
 postal map, 5402
 precipitation data, hourly, 3401
 radioactivity, airborne, 1952-55, maps, 1803
 reimburse for improvements on lands in Sweetwater County—
 law, 12181
 report, 661
 sedimentary rocks, chemical composition, 14172

X

X-11 variant of census method II seasonal adjustment program, 5902
 X-15, *see* Airplanes.
 X-258 rocket motor, *see* Rockets.
 X-ray apparatus spectral energy distribution of unfiltered X-rays from 250 kV constant potential machine, 1789
 X-ray photography, *see* Radiography.
 X-ray spectra, *see* Spectra.
 X-ray technicians, training, national conference, proceedings, 2830
 X-rays:
 beta excited sources, absorptiometry, interim report, 5770
 celestial sources, high angular resolution studies program, 8428
 continuum radiation emitted from high temperature plasmas, to determine electron temperature, 11681
 crystallographic data, molar volumes, and densities of minerals and related substances, 17818
 diagnosis, USSR study, 1257
 diffraction, powder patterns, 15591
 electron beam parallel X-ray generator, 17983
 electron beam welder X-rays its own welds, 14423
 fluorescent excitation using isotopic X-ray emission, 5779

X-rays—Continued

- improved grazing incidence optics, laboratory program to develop, 6726
- isotopic sources for portable stress analysis equipment, feasibility, 14809
- machine simulator, 18191
- monoenergetic, from alpha emitting isotopes, generation and practical use, 4234
- packaged disaster hospital X-ray section, establishing, operating, etc., 2822
- pepsin structure, USSR studies, 12725
- roentgenograms, bite-wing, use to evaluate dental caries increments, 14321
- soft, photolionization detector, 9838
- solar spectrum, reproduced in vacuum, 12895
- source, uses interchangeable target anodes to vary wavelength, 14424
- structural crystallography of globular proteins, USSR study, 12726
- wavelength conversion tables and graphs for qualitative electron probe microanalysis, 17039
- wavelengths, and X-ray atomic energy levels, 17036

XB-70, see Airplanes.

Xenon:

- dilute, viscosity and thermal conductivity coefficients, 11589
- fluoride solutions effective as fluorinating agents, 12836
- fluorides show potential as fluorinating agents, 12839
- forms stable compound with fluorine, 5139

Ximenes, Vincente T., nomination, hearing, 10863

XV-9A hot cycle research aircraft, *see* Aircraft.

XV-11A, *see* Airplanes.

Xyloterinus politus, *see* Beetles.

Y

Yakima project:

- Kennecott division extension, construction, etc.—

- hearing, 9319
- report, 7777

Yakobson, Sergius, Intellectual ferment in Soviet Union, 4571

Yakowitz, H., homogeneity characterization of NBS spectrometric standards 3, white cast iron and stainless steel powder compact, 2737

Yakut-Autonomous Soviet Socialist Republic, seismicity of Yakutiya, USSR book, 16769

Yakut Scientific and Research Institute of Tuberculosis, meeting, 1333

Yang, Kimberly A., relief, 776

Yang, Kuo-Hua, relief, 12356

Yannakakis, John E., relief, 13607, 13772

Yards and Docks Bureau, *see* Naval Facilities Engineering Command.

Yarn:

- production, current industrial reports, 4347, 17437

- change sheet, 7482

- spun, for sale, current industrial reports, 3169

Yates, Harry O., III, key to Nearctic parasites of genus *Rhyacionia*, with species annotations, 16649

Yaukey, Raymond S., basic data on economy of United Arab Republic (Egypt), 12132

Yaw:

- coupling in turning maneuvers of large transport aircraft, simulator and flight study, 11494

Gemini configurations, damping and stability in pitch and yaw, errata, 1474

Yeago, Patricia H., education, PACAF basic bibliography, 8866

Yearbooks:

- agriculture, Hist, 8620
- Intermountain region, Forest Service, 15280

Yearbooks—Continued

- minerals, 1964, international—

- departmental edition, 1406

- document edition, 515

- minerals, 1965—

- area reports, domestic—

- departmental edition, 12810

- document edition, 12194

- fuels—

- departmental edition, 11366

- document edition, 10405

- metals and minerals except fuels—

- departmental edition, 9761

- document edition, 9049

Yellow birch, *see* Birch.

Yellow peach moths, new plant pest, description, etc., 7285

Yellow poplar, *see* Tuliptree.

Yellowstone National Park:

- elk population, control, hearings, 10803

- general information, 11620

Yellowstone (United States ship):

- deployment to Malta, agreement, 15800

Yellowtail Dam and Reservoir, *see* Missouri River Basin project.

Yellowtail unit, *see* Missouri River Basin project.

Yeloushan, Charles C., mineral industry of Pennsylvania, 5362

Yeomen:

- background notes, 14669

- capsule facts for Armed Forces, 15919

- road of Yemini revolution, 12754

Yen, Yin-Chao:

- heat conduction in moist porous media, 10256

- melting problem with natural convection, 17376

- natural convection in ice melting from below, 7378

Yenisey River, central region, spring ice jams, USSR study, 12724

Yeomen, 3 & 2, Navy training course, 11668

Yerkes, Vern P., weight and cubic-foot relationships for Black Hills ponderosa pine saw logs, 6370

YIG, *see* Garnet.

Yim Mei Lam, *see* Lam, Yim Mei.

Yin-Chao Yen, *see* Yen, Yin-Chao.

Yokem, Delmar, survey of winter construction practices, earthwork, concrete and asphalt, 98

Yoda, Renpei, columbium-base alloys, 14344

Yolles, Stanley F., talk, Oct. 14, 1965, 8655

Yong Ok Espantoso, *see* Espantoso, Yong Ok.

Yoo Young Hui, and daughter, relief, 16183, 17530

York, Harold F.:

- mineral industry of—

- Rhode Island, 1403

- Vermont, 1405

York, Pa., area wage survey, 11318

York-Shipley, Inc., President's E award for excellence in exporting (remarks), 4447

Yorktown, Va.:

- properties within Colonial National Historical park, acquire—

- law, 16130

- reports, 12247, 15111

Yoruba language, intermediate texts, 8751

Yosemite National Park, El Portal site, leases, extend term, report, 15002

Yoshida, Howard O., longline fishing for deep-swimming tunas in Marquesas Islands and adjacent areas, 12549

Yoshikawa, Kenneth K., analysis of radiative heat transfer for large objects at meteoric speeds, 12058

You and the VA, 2964

You and your passport, 10096, 18226

You as a volunteer, handbook for hospital volunteer workers, 1661

You I Souk, relief, 345

You, your country, and Navy Nurse Corps, 5342

Young, A. Barrie, Jr., approach, naval aviation safety review, 3036

INDEX 1967

Young, Clarence P., jr., aeroelastic divergence characteristics of unguided, slender-body, multistage launch vehicles, 9883

Young, Cortland E., jr., overflow system for standard U.S. Weather Bureau evaporation pan, 2318

Young, John W., trajectory optimization for Apollo-type vehicle under entry conditions encountered during lunar return, 9919

Young, Joseph W.:
functional comparison of basic restraint systems, 17413
recommendations for shoulder restraint installation in general aviation aircraft, 7446

Young, L. E., magnitude and frequency of floods in United States, Pacific slope basins in California, 11188, 14177

Young, Marvin P.:
clamp system for Pharos capacitor bank, 11671
vacuum clamp switch for Pharos capacitor bank, 9884

Young, William H.:
coal, bituminous and lignite, 5099
thickness of bituminous coal and lignite seams mined, 14327

Young workers, see Youth.

Youngstown, Ohio, area wage survey, 8308

Your body and radiation, 7445

Your career with Federal Power Commission, 4779

Your child from 3 to 4, 7514

Your Department of State, 17217

Your duties as representative payee, 15744, 15211

Your farm rent determination problem, 17311

Your Federal income tax for individuals, 2415

Your name is somewhere in census records, 10400

Your social security, 5506

Your talents, let's not waste them (address), 8798

Youth:
alternatives to incarceration, studies in delinquency, 10135
communities, commitment to opportunity (address), 17839
culture of youth, subculture, dependency status, etc., 7232
dialogue on adolescence, 4365
disadvantaged, Office of Education programs, 6192
disadvantaged young men, they need to learn, can you help Job Corps train them for employment, 7573
epileptic, identification, recruitment, and placement, technical information for project sponsors, 2488
facts and figures, 7515
facts to face about our youth, programs to help, 4728
fitness test norms and presidential award, 5408
juvenile delinquency and youth crime, task force report, President's Commission on Law Enforcement and Administration of Justice, 11703
juvenile delinquency and youth offenses control act, summaries of training projects, 7233
Lincoln Center's student program opens new world to teenagers, 12465
manpower development and training act, learn and train for job under MDTA, 13971
message to young workers about fair labor standards act, as amended in 1966, 8787
military service, results of examination, 8900
parents and teenagers, note to agents, 4765
pennywise teenagers, 15215

Youth—Continued

physical fitness, suggested elements of school-centered program, 8617

President's Youth Opportunity Campaign, 1966, Agriculture Dept., 8833

profile of youth, 1968, print as Senate document, report, 917

resident worker, examination announcement, 12111

runningawayness (address), 8045

rural—
changing society, age of transition, 17305
clubs around world, handbook for developing programs, 16570
what kind of work would you like to do? 15222

teens sound off, faculty listens to students' serious evaluation, Lake Oswego High School, 17726

trustees of posterity (address), 15877

upward bound, program to help youth from low income families achieve college education, policy guidelines, etc., 9385

vote of confidence (address), 4247

youth opportunity campaign, summer 1966, training conducted by Federal agencies for non-college groups employed, report, 7550

Yo-yo device, tangential despin, on rotating body, 3-dimensional analysis, 6888

Ytterbium trichlorides, heats of formation, 6683

Yttrium:
electrorefining, 15482
groups 5 and 6 binary and ternary compounds, thermoelectric properties, 16867
northern New Jersey, potential resources, 6674
reaction rate of solid yttrium metal with molten lithium fluoride, 15474

Yttrium iron garnet, see Garnet.

Yu Wen Shi, relief, 9214

Yuan, S. W., circulation control airfoils by means of jets, 7408

Yuba River and Valley:
basin, engineer report—
departmental edition, 1027
document edition, 525

Yugoslavia:
background notes, 1624
claims of U.S. nationals—
agreement, text, regulations, etc., 8050
timely determination, hearing, 12300
declaration on provisional accession to GATT, 2895
economic reform, science, and scientific research work, 6515
education problems of computer engineering, 1321

Federal Security Service, replies given by Federal Secretary for Internal Affairs Milan Miskovic to questions asked by employees, 6521

infectious diseases, current state and organizational problems in preventing and countering them, 15400

mineral industry, minerals yearbook chapter, 16859

neutron sources, practicability of production and application, 4980

protocol for accession to GATT, 10100

Yukon Flats region, Alaska, vegetation, 5725

Yuma, Ariz., equal employment opportunity program, economic data, 11771

Yung, Kim Kap, relief, 302

Yung, Mi Kim, see Kim, Yung Mi.

Z

Zaborsky, John, research on digital adaptive control system, 5170, 14378

Zacatecas, Mexico, Fresnillo mine, geometry of metal distribution, 9771

Zaffarano, Richard F., natural gas, 2567

Zagoria, Sam :

remarks—

Dec. 7, 1966, 2750

Feb. 23, 1967, 6939

Mar. 27, 1967, 8532

June 28, 1967, 12993

Sept. 27, 1967, 17044

Oct. 20, 1967, 17043

working with automation, 11300

Zaker, Mildred J., voluntary help wanted for war on poverty projects, 9286

Zalovick, John A., NASA research on noise-abatement approach profiles for multi-engine jet transport aircraft, 12956

Zambia :

foreign trade regulations, 10459

investment guaranties, agreement, 2933

labor conditions, 1392

mineral industry, minerals yearbook chapter, 12806

Zaretsky, Erwin V. :

evaluation of high-temperature bearing cage materials, 5274

temperature limitations of ester, etc., base lubricants in ball bearings, 15376

Zectran, cholinesterase inhibition, following oral feedings, 16657

Zeft, Howard J., study of man in oxygen-hellum atmosphere, exercise performance and cardiovascular response, 88

Zehnpfennig, T., improved grazing incidence X-ray optics, 6726

Zeigler, Glen, relief, 348

Zeilinger, John E., coal-fired water pump, 1408

Zen, E-An, construction of pressure-temperature diagrams for multicomponent systems after method of Schreinemakers, geometric approach, 2359

Zender, George W., compression tests of open-face truss-core sandwich panels, 5255

Zens, Clarence M., international commerce, 3434

Zerlaut, Gene A., light scattering in highly reflecting pigmented coatings, 14392

Zero gravity :

condensing mercury flow, photographic study, 12939

environment, bubble mechanics, boiling heat transfer, and propellant tank venting, 5164

slush dynamics study, vehicle and spacecraft description, 11530

see also Weightlessness.

Zero power reactors, see Reactors (atomic).

Zero pressure, thermodynamic properties of nitrogen gas, 6636

Zero surfaces, see Surfaces.

Zeydel, E. F. E., pressure distribution on oscillating panels in low supersonic flow with turbulent boundary layer, 6718

Zhizn' otdannaya lyubimomu delu (Russian book), review, 1177

Zhukov, G., reminiscences on battles for Moscow, USSR studies, 1287

Ziegler, James F., calculation of inelastic electron scattering by nuclei, 12019

Ziegler, P. N., use of displacement, flash, and depth-of-flash displays for providing control system information, 5354

Zierdt, William H., Jr., Army Reserve magazine, 3044

Zlkeev, Nikolay T., weather modification in Soviet Union, 1944-66, 17903

Zimmerman, William H., soil survey of Jefferson County, Ky., 8704

Zimmerman pine moth, see Moths.

Zimmet, Steven, public domain, its place in our history, its place today, etc., 2525

Zinc :

deficiency, western field and vegetable crops, 5640

geology of upper Mississippi Valley zinc-lead district (series), 6388

industry, mineral industry survey, monthly, 4075

Zinc—Continued

iron contaminated, refining by filtration and centrifugation, 5125

lead-zinc industry, Pacific northwest, analysis, 11352

lead-zinc industry stabilization—

hearing, 12413

report, 10752

lead-zinc sinter, complex, electric smelting, 14353

liquid, solubility of metals in, data compiled, 12844

mine production, mineral industry survey, monthly, 4076

minerals yearbook chapter, 2592

ores, domestic reserves and potential sources, evaluation, 8340

scrap, mineral industry survey, monthly, 4078

use of steel and tantalum apparatus for molten Cd-Mg-Zn alloys, 8397

zinc-lead district of upper Mississippi Valley, aeromagnetic and tectonic analysis, 4888

Zinc chloride, vapor pressure, SnCl₂-ZnCl₂ binary system, 16864

Zinc isotopes, Zn-65, distribution in freshwater ponds, 15681

Zinc oxide, mineral industry survey, monthly, 4077

Zinc sulfide, cobalt-doped crystals, bleaching effect under influence of ruby laser pulses, 9926

Zink, James B., spectrochemical analysis of coal ash, 14342

Zinn, Charles J. :

Constitution of U.S., index, etc., 13553

how our laws are made, 10520

reprinting, reports, 10589, 10788

Zinnikas, John D. :

Pacific basin market for wood products for military support activities, 1095

requirements for new housing in Hawaii, 1965-70, forecast, 16664

Zion National Park :

general information, 6987

region, southwestern Utah, Carmel formation, review, 11168

ZIP code :

abbreviations for use with ZIP code, 7043

last word in mail addressing, 1559

Mr. ZIP, who he is, what he does, 5388

postal zone charts, 2790

Zippers, see Fastenings.

Zircaloy, see Zirconium.

Zirconium :

alloys with small amounts of iron and copper or nickel show improved corrosion resistance in superheated steam, 8796

carbide cathodes of solid solutions, evaporation rates, 6532

in hafnium, determination, 9985

mass transfer in stainless steel-Cb-1Zr-potassium system, and effect of stabilization of carbon and nitrogen in stainless steel, 12864

zircaloy-aluminum composite pressure tubing, fabrication process, development, 8907

Zitter, Meyer, revised projections of populations of States, 16014

Zoaridae, north Pacific Ocean, new genus and new species, 11606

Zoby, Ernest V. :

correlation of free-flight turbulent heat-transfer data from axisymmetric bodies with compressible flat-plate relationships, 5272

isotropic flow solutions for reacting gas mixtures in thermochemical equilibrium, 16979

Zoning, aid to community resource development, 17326

see also Cities and towns—Rural zoning.

INDEX 1967

- Zoogeography, San Andreas fault, Calif., zoogeographic evidence for late Tertiary lateral slip, 17827
- Zoology:
 - medical and veterinary, index-catalogue, 14-15, 13205
 - valid names, of Portland catalogue, 3546
- Zooplankton, Hawaiian waters, 1955-56, abundance and distribution, 14064
- Zootechnical Research Institute, achievements and problems since founding, Rumanian interviews, 9664
- ZPR-1, see Reactors (atomic).
- Zrubek, William E., split phase telecommunications link, 15580
- Zubovic, Peter, distribution of minor elements in some coals in western and southwestern regions of Interior coal province, 8153
- Zuni Mountains, soil survey of area, N. Mex., 15749
- Zuniga, Manuel A., relief, 9253, 13495, 13599
- Zusi, Richard, role of depressor mandibulae muscle in kinetics of avian skull, 11610
- Zvezdograd, USSR, space port traced, development, 1251
- Zych, Zofia, relief, 350



2-
1-
e,
.,
5,
e
1-